

UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
ACES

NOTICE: Return or renew all Library Materials! The Minimum Fee for each Lost Book is \$50.00.

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.
To renew call Telephone Center, 333-8400

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

1161-O-1096

JUL 26 2001

AGRICULTURE LIBRARY

Digitized by the Internet Archive
in 2011 with funding from
University of Illinois Urbana-Champaign

<http://www.archive.org/details/householdresourc31987magr>

Household Resources and Their Changing Relationships

Case Studies in Gujarat, India



International Agriculture Publications
General Series Number 3

College of Agriculture
University of Illinois
at Urbana-Champaign

Household Resources and Their Changing Relationships

Case Studies in Gujarat, India

Edited by Frances M. Magrabi and Amita Verma

International Agriculture Publications
General Series Number 3

College of Agriculture
University of Illinois
at Urbana-Champaign

May 1987

AGRICULTURE LIBRARY

DEC 20 1990

UNIVERSITY OF ILLINOIS

Copies of this publication may be obtained from the following address:

Office of International Agriculture
University of Illinois at Urbana-Champaign
113 Mumford Hall
1301 West Gregory Drive
Urbana, Illinois 61801
U.S.A.

Telex: 206957

SPONSORED BY THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN AND THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA.

©(to be obtained) by the Board of Trustees at the University of Illinois

FOREWORD

This volume focuses on the patterns of daily living of rural households in one part of India. It was developed as a cooperative effort of two universities--the University of Illinois at Urbana-Champaign (UIUC) and Maharaja Sayajirao University of Baroda (MSUB)--the faculties and staffs having a common interest in the study of women as participants in social and economic development. The idea originated in work underway in 1983 at UIUC to develop courses on this subject, with an emphasis on women as members of households. It soon became apparent that although there is a wealth of information about specific problems--such as nutrition, poor housing and sanitation, and high rates of illiteracy--in developing countries, few materials are available which show how these problems occur and interact within a given household setting. This collection of papers is intended to help fill this gap.

Correspondence between the two universities was initiated in early 1984, and plans were developed on the content and scope of material needed and methods to be used to gather the information. In the summer of 1985, a six-member team from UIUC spent six weeks in India. The bulk of its time was spent working with a counterpart team from MSUB. The work was supported by a grant from the Fulbright-Hays Group Study Abroad Program.

Members of the teams visited and observed village households and development projects, interviewed household members and project officers, and reviewed government reports and published research. They also drew extensively on original research performed by members of the MSUB team over the past decade and their expertise acquired from extension educational programs and other contacts with families in Gujarat State. The information thus collected has been summarized in the various papers in this volume.

Case study material has been emphasized. In some instances, the same families have been described from several points of view--their employment, their use of transportation, their household production and consumption patterns, their household possessions. In other cases, similar families are described. Most families were from the villages of Rustumpura and Jaspur. Others were from nearby villages or city slums. The families were poor but not destitute; thus neither extreme poverty nor wealth was represented.

The authors of this volume appreciate the warm welcome and friendly cooperation they received from the families they visited and others who provided information. They hope this volume will provide a true picture of life as it is lived by families in one segment of India's vast population.

Frances M. Magrabi and Amita Verma
Project Directors

PROJECT SPONSORS

Office of Women in International Development University of Illinois at Urbana-Champaign

TEAM MEMBERS:

Frances M. Magrabi, Ph.D.
Professor of Family and Consumption
Economics
(Project Director)

Berenice A. Carroll, Ph.D.
Associate Professor of Political
Science and Director of
Office of Women's Studies

Ellen C. K. Johnson, M.A.
Staff of Office of Women in
International Development and
doctoral candidate in Anthropology

Navaz Bhavnagri, M.S.
Staff of Office of Women in
International Development, and
doctoral candidate in Early
Childhood and Elementary Education
(Assistant Project Director)

Sharon Y. Hart, M.S.
Assistant Expanded Food and Nutrition
Education State Coordinator
Cooperative Extension Service

Barbara A. Yates, Ph.D.
Professor of Comparative Education

Faculty of Home Science Maharaja Sayajirao University of Baroda

TEAM MEMBERS:

Amita Verma, M.A.
Professor of Child Development
(Project Director)

Parul Dave, M.S.
Reader in Child Development

Tara Gopaldas, Ph.D.
Professor of Foods and Nutrition and
Dean of the Faculty of Home Science

Sundar Gujral, Ph.D.
Professor of Foods and Nutrition

Kalpana Romeshchandra Paralikar, Ph.D.
Reader in Home Science Education

Rachel George, Ph.D.
Reader in Home Management
(Joint Project Director)

T. S. Saraswathi, Ph.D.
Professor in Child Development

Subadra Seshadri, M.S.
Reader in Foods and Nutrition

Kamala Srinivasan, Ph.D.
Professor of Home Management

Smita Shukla, M.Sc.
Teaching Assistant

ACKNOWLEDGMENTS

The project team members are grateful for the support received from the Fulbright-Hays Group Study Abroad Program, U.S. Department of Education, and the Office of International Agriculture, University of Illinois at Urbana-Champaign (UIUC). They wish also to thank the Office of Women in International Development, UIUC, and especially note the initial planning and contacts made by the Director of that Office, Dr. Barbara A. Yates, and staff member and WID Associate Navaz Bhavnagri.

Others to whom gratitude is due include Mr. Z. S. Chatwal, National Dairy Development Board; Dr. Uma Vyas, Tribhuvandas Foundation; Mr. Ravi Sexena and Mr. Dinesh Pandya, District Development Officers, Baroda District; Mr. Arvind Pandya, Taluka Development Office, Vaghodia, Baroda District; Ms. Anu Thakkar, Muni Ashram; Mrs. Ela Bhatt, Self-Employed Women's Association; Ms. Pallavi Naik, Center for Health Education, Training, and Nutrition Awareness; Dr. Ashalata Kulshressha, Gujarat Women Economic Development Corporation; Mrs. Jyotsnaben Shan, Vikas Jyot Trust; Professor U. Modi, Nutrition Rehabilitation Center, S. S. G. Hospital; and Dr. Suma Chitnis, Tata Institute of Social Sciences.

Thanks also is due to Shagufa Kapadia, who assisted with scheduling and arrangements for the team, Mr. Parvez Dalal, who provided living accommodations for team members in Rustumpura, and to Mrs. Vinaben Rameshbhai Patel, area level supervisor, and Mrs. Savitaben Chandubhai Panchal, preschool teacher, who introduced team members to families in the village and were a constant and invaluable source of information about local conditions. Gratitude is due also to Jigisha Shastri and Mini Cheema who assisted with collection of data, and to Roopa Desai, who assisted in library research. The team is indebted to Shirley Jones, who typed this manuscript, and to Carol Higgins who gave editorial advice.

Finally, our most sincere thanks go to all the villagers who so freely gave us of their time and energy as they told us about themselves and their families and shared their lives with us.

CONTENTS

FOREWORD	iii
PROJECT SPONSORS	iv
ACKNOWLEDGEMENTS	v
PART ONE: THE SETTING	1
1. Profiles of Two Indian Rural Settings	
I. Village Rustumpura	
by Ranjana Dutta and T. S. Saraswathi	2
II. Jaspur Village	
by Rachel George	5
2. Visitors View A Village	
by Ellen C. K. Johnson and Navaz Bhavnagri	9
3. Village Households	
by Ellen C. K. Johnson and Smita Shukla	18
4. Agriculture	
by Barbara A. Yates and Kalpana R. Paralikar	26
PART TWO: FOOD, NUTRITION, AND HEALTH	30
1. Women's Needs: Health and Nutrition	
by Tara Gopaldas	31
2. Meal Pattern, Nutrient Intake, Intrafamilial Distribution of Foods, Food Habits and Taboos	
by Sundar Gujral	35
3. Post Harvest Conservation of Food at the Household Level	
by Sundar Gujral	38
4. Nutrition and Health Education in the Integrated Child Development Services Scheme for Tribal and Urban Households	
by Subadra Seshadri and Farhat Saiyed	40
PART THREE: WATER SUPPLY, SANITATION, AND FUEL	45
1. Water	
by Kalpana R. Paralikar	46
2. Fuel	
by Rachel George	49
3. Water, Sanitation, and Fuel in Rustumpura: A Case Study	
by Sharon Y. Hart	51

4. Sanitation and Water Supply: A Tribal Case Study by Parul Dave	53
PART FOUR: HUMAN RESOURCE DEVELOPMENT	
1. Education as a Household Resource by Kalpana R. Paralikar and Barbara A. Yates	57
2. The Schools of Rustumpura: A Case Study by Barbara A. Yates	60
3. Education of Tribal Women by Parul Dave	66
4. Extension Training Programs for Women by Kalpana R. Paralikar	67
5. Socialization of the Infant: Two Case Studies by Navaz Bhavnagri	69
6. Growing Up in Rustumpura: Profile of a Day by Ranjana Dutta and T. S. Saraswathi	78
7. Profile of a Tribal Child by Parul Dave	81
PART FIVE: COMMUNITY AND HOUSEHOLD RESOURCES	
1. Paid and Unpaid Work--Activities and Opportunities in a Rural Area by Kamala Srinivasan	84
2. Allocation of Money and Nonmoney Resources by Rural Households by Rachel George	91
3. Food Related Activities and Resources by Rachel George	94
4. Transportation as a Household Resource by Frances M. Magrabi	97
5. Time and Task Allocation in Rural Households by Ellen C. K. Johnson and Rachel George	98
PART SIX: IMPETUS FOR CHANGE	
1. Resources and Social Change: The Impact of International Funding Agencies on Women's Programs in India by Berenice A. Carroll	112
GLOSSARY	119

PART ONE: THE SETTING

In this section, we provide a general overview of the village and household setting. One village--RustumPura--is described in detail. A second village--Jaspur--is also described. In the first paper Dutta and Saraswathi provide general information about Rustumpura to help us identify the main physical, social, and some cultural features of the village setting. George provides a similar, briefer treatment of Jaspur. Johnson and Bhavnagri describe daily activities and the appearance of Rustumpura from a visitor's point of view, and Johnson and Shukla present characteristics and daily situations of particular village households. Finally, Yates and Paralikar describe the agricultural setting and activities in Gujarat, with emphasis on responsibilities of women. The section is intended to provide a context for understanding the later sections, which focus on specific aspects of household life in these and other nearby villages.

PROFILES OF TWO INDIAN RURAL SETTINGS

I. Village Rustumpura

by

Ranjana Dutta and T. S. Saraswathi

General Description

Rustumpura is a village in Waghodia taluka on the northeastern border of Baroda city. Baroda district is situated in the central part of Gujarat State in Western India.

The drive to the village brings to view the arid and hilly countryside, with red rocks at the quarry sites. The soil, too, is either reddish or black and sticky. This area has inadequate and brackish subsoil water and poor irrigation facilities, which accounts for its poor crop yield (a situation that may be alleviated once the Narmada river water irrigation project is completed). The riverlet Dev serves as the only source of water to the nearby farms. Agriculture depends mainly on monsoon rains from mid-June to August, when fields look fresh and green. Village cattle graze near the pond, at the edges of fields, or, at other seasons, in the fields when crops are harvested.

Historical Profile

Formerly a part of Kanjara estate, Rustumpura was a barren land surrounded by thick scrub forests and called Valaghod, i.e., "an abode of owls." It was used as shooting grounds until 1950 and is even now believed to be visited by wildcats. About 1820 a small tribal settlement existed here with a few grain fields, headed by Thakur Fateh Singhji. In 1895 the area came under the management of Panchmahal District when a Parsee, Sheth Bamanji Ardeshar Dalal from Baroda, took the land on separate leases from the British and later consolidated them into a major land holding. He had the thickets cleared and brought in farmers, the ancestors of today's village Nayaks, to start cotton cultivation. About 1900, because of persistent fears of attack by wild animals and bandit tribes, the Seth hired some Muslim men from Baroda to protect the crop. They became the ancestors of the Muslim community in the village today. The Hindu Baniya community in the village traces its origin to shopkeeper friends of the Parsee Sheth. The Dalal family had village wells dug, built many homes for the villagers and established public services such as the health care center, primary school, veterinary hospital and secondary school. The early home of the Parsee founder of the village, originally used as a hunting lodge, still stands at the edge of Rustumpura. The village received its present name from Rustumji, grandfather of the village founder.

Demographic and Economic Profile²

Rustumpura is a medium-size village of 140 households with a field area of nearly 530 acres. The main settlement has 106 households comprised of

1. The authors wish to express their appreciation to Ms. Ellen Johnson for her editorial comments.

2. Based on the following secondary data sources: (1) National Population Census 1971-1981; (2) Survey of village facilities by Gujarat State Economical and Statistical Bureau, Gandhinagar, 1982; (3) Population Survey of Social Inputs Project for Area Development, Faculty of Home Science, 1980; and (4) District Statistical Abstracts 1978-1979.

caste Hindu and Muslim families and some families of the scheduled castes. A small hamlet called Govindpura is an extension of the main village and includes 34 households of families belonging to scheduled castes and scheduled tribes. The population is a little more than 1,000 people.

The literacy level in the village is approximately 37 percent, with higher literacy levels among males and caste Hindu families.

Nearly 70 percent of the population is dependent upon agriculture, either as farm owners or as agricultural laborers. Other occupations include government service, business, and artisans such as blacksmiths, tailors and potters. Female employment is reported to be low (16 percent). Most employed women work as farm laborers or as housemaids and water carriers. Some families supply milk to a cooperative dairy; some have family members who are employed in a rug weaving center or who make leaf plates at home for sale. As may be expected, there is considerable seasonal variation in occupation among agricultural laborers. March to June are the lean months, when a number of people migrate to other villages or quarry sites for work.

The indices of occupation, landholding, and income show that the village economic structure consists of two clear strata, the poor (agricultural laborers, small farmers, and artisans) and the rich (upper caste Hindus and Muslim traders and servicemen). Very few could be classified as middle class.

Basic Facilities Available and Their Utilization

Physical Facilities

The village has a metaled access road linking it to the city and nearby villages. Regular bus service is the main transport facility and is usually loaded to capacity. For short distances, the villagers use bicycles and bullock carts, except during monsoons when those are likely to get stuck in the mud. The morning post-bus brings in the newspaper and letters, which are checked at the postal counter in the village and distributed by a postman from house to house.

A limited supply of vegetables and fruits is brought by the local bus from the nearby town of Valghodia. Hawkers and vendors occasionally visit the village selling candy, jewelry, fish, or a cart load of seasonal vegetables.

Most of the homes, except among the very poor in Govindpura, have electricity which is carefully consumed. The street lamps cast patches of dim light amidst dark shadows.

A few private wells, three community wells, and a pond supply water to the village. The latter has multipurpose utility. When full after a rain, one can see both clothes and utensils being washed there. Also, children and cattle bathe and play in the water. The main source of village drinking water

3. Scheduled castes and tribes are those considered by the government to be low enough in socioeconomic status that they should be awarded certain kinds of preferential treatment.

is a large deep well near the bus stand. The harijans⁴ have their own well at the periphery. Water has to be drawn manually with buckets, using a pulley system.

Sanitation facilities range from private toilets in the well-to-do homes, backyard latrines in some, and the use of open fields and hillocks as open-air latrines by most. The latter proves convenient in the absence of running water facilities. Women, especially from the poorer sections of the community, use the fields during the wee hours of the morning when absence of light offers some privacy.

Health and Nutrition Services

The village has a government-run primary health unit (PHU) staffed by a resident doctor and auxiliary nurse midwives. Occasionally the Health Center holds health camps for neighboring villages. Home remedies such as ginger tea for colds, tea leaf poultices for dog bites, and the like, are an inextricable part of the villagers' life and complement the health care provided by the PHU and private doctors. Besides medical facilities, the village also has access to supplementary nutrition programs whereby children and pregnant women are provided with a high protein snack.

Educational Facilities

Educational facilities available in the village (and catering to neighboring villages, also) include the creche and pre-primary school, the primary school (until Standard VII) and the secondary school (Standards VII to X). Hostel accommodation is available for boys from scheduled castes or scheduled tribes for a nominal fee. Students have access to the school library and can apply for government or private scholarships. There is provision for occasional adult literacy classes. The well-to-do, however, send their children to a nearby town or city for senior high school and college education. In general, education of boys receives greater emphasis than that of girls among all classes and castes.

Recreation

Besides religious festivals, some of which are community events, there are few recreational facilities available in the village. When a movie is shown in this or a neighboring village, as occasionally happens, most families, except the rich and the very poor, go enthusiastically. Playing cards, gambling, and drinking are favorite pastimes among most young and middle-aged men in the community.

Other Facilities

Some of the other facilities in the village are veterinary services, wherein only the cost of medicine is to be borne by the villagers, a dairy development scheme and cooperative milk society, and an agricultural credit cooperative society.

Facilities conspicuous by their absence and expressed as "wanting" by women include domestic water supply, pucca (stone or brick rather than mud) houses and wells, a steady supply of fruits and vegetables, proper sanitation facilities, irrigation facilities, and police protection.

4. The harijans, "children of God," as they were called by Mohandas Gandhi, are low-jati (low subcaste) people, formerly called "untouchables."

Socio-Cultural Set-Up

In Rustumpura, the power hierarchy among the different caste social classes is evident in the clustering of the houses. The well-to-do play a leading role in the management of village affairs, mutely supported by others.

Hinduism and Islam are the two main religions in the village. The two communities live in harmony and often express disapproval of the prevalence of Hindu-Muslim communal riots in the nearby cities. Both caste and religion impose well-internalized restrictions on matrimonial alliances. The rare event of marrying outside caste or religion means ostracism and breaking of family traditions.

Interaction among neighbors appears frequent and reciprocal. Neighbors are often members of a kin group, tracing their lineage to the early settlers in the village. Neighbors visit each other frequently, exchanging food or other articles, and assisting in daily chores, especially on occasions such as marriages, festivals, birth and death.

Adjacent houses are often separated only by a mud wall, giving only visual privacy. Community members spend much time in the front and back yards and can be seen and heard almost constantly. Fights among neighbors are not uncommon and relatives may not be on speaking terms for days, weeks, months, or years.

Opinions regarding the village are affected by the length of residence in the village and proximity of relatives. Long-term residents feel that people in the neighborhood are nice and friendly.

Status of Women

Males are considered dominant in village life, even among the agricultural laborers, where both husband and wife are daily wage earners. Men are considered superior--more knowledgeable and worldly-wise. It is generally accepted that marriage is necessary in order for a woman to have a protector; being single is frowned upon. Marriage confers upon a woman the socially accepted status of womanhood, which is reinforced by the birth of the first child, especially a son. Barrenness is considered a curse, and a barren woman a bad omen. In practice, however, women believe that barrenness is usually tolerated, though in some cases the husband may marry again in order to have children.

II. Jaspur Village

by
Rachel George

General Description

Padra taluka is one of the twelve talukas in Baroda District. It is comprised of eighty-two villages and one town, Padra, where the taluka office is situated. Jaspur, a village in Padra taluka, is about 23 kilometers from Baroda city and 6 kilometers from Padra town. Jaspur village is identified by the government as backward, where much development is yet to take place. The

village has a population of 4,313 (745 households), of which 2,248 are males. The scheduled castes include a total of 168 inhabitants. Only 16 percent of the population is literate. Of the 1,200 workers in the village, 28 are females. These women work in their own fields as agricultural laborers, or in household industries.

Before 1930, the village was situated on the bank of the Mahi River. Later, due to frequent floods and erosion, the inhabitants shifted two kilometers away from the bank and set up the present village. A tarred road leads to Jaspur from Padra; however, the street within Jaspur is not tarred. The panchayat office is at the entrance to the village on the left side of the main street. The eleven elected members of the panchayat include no women.

Community Resources

The village has a balwadi (a preschool or kindergarten) adjoining the panchayat office, a primary school adjacent to it and a secondary school. Teachers are drawn from the village as well as from Padra town.

The village gets its drinking water from various sources such as the river, wells, and tanks. Households use a pond near the entrance to the village for washing clothes, cleaning utensils, and bathing self and livestock. The panchayat has extended water pipes from its well into all bylanes of the main street, from which households can extend their own water supply lines. The water supply is given for an hour a day, normally in the morning from 7:00 to 8:00 A.M. On payment of an additional amount of 15 rupees, water is provided for a longer duration on special occasions such as a marriage.

A post office operates in the village. There is no telegraph office.

The main source of livelihood is agriculture. The staple food consists of bajra (a cereal), wheat, jowar (sorghum), and rice, as these are the grains grown locally. Farmers grow tobacco as a cash crop.

The land is irrigated by tap water and wells. The panchayat office lends pumps free of charge for lift-irrigation purposes. A few--four to five private households--lease pumps at a rent of 35 rupees per day to needy farmers.

Farm laborers are usually paid 10 rupees per day, irrespective of age and sex. Farm implements have to be sent to Padra for repair and maintenance.

The households keep livestock, especially goats, buffalo, and cows, as a source of milk, with the surplus being sold to a cooperative to supplement their income.

5. Administration of a village is carried out by local self-government. A village with a population of less than 10,000 has a gram (village) panchayat, a governing body with nine to fifteen members elected for five-year terms. The panchayat is headed by the sarpanche, who is elected by all voters of the panchayat area.

The local industries include making bidi (a kind of cigarette), carpentry and a welding shop. Nonagricultural jobs include that of postman, messenger of the panchayat, helper in balwadi, peon (odd-job man) in the schools, and so on. There is no shop dealing in fertilizer or biocides and no godown (storage building) for grain storage. Each household takes care of its own storage needs. Surplus grains are not produced in this village. The farmers grow only their own requirements and the rest of the land is used for growing tobacco--a cash crop.

Recently a health unit with one nurse was started. It is primarily concerned with family planning and women's health problems, but it treats minor ailments, too. The cases that cannot be treated by the nurse are referred to the Government Hospital at Padra. Two private resident doctors practice medicine in the village, and doctors from Government Hospital at Padra come on request. A veterinarian stationed at Padra attends to needs of the village for a charge of 15 rupees per visit.

Buses link Jaspur with Padra and Baroda. Other modes of transport include the tempo (a three-wheeled vehicle, primarily for transporting goods) and the autorickshaw (a three-wheeled taxi). The cycle is a common mode of transport used solely by males. Bullock carts and a few tractors are also used by households.

Bhajan mandals operate among the rural women. These are groups who gather to sing devotional songs and chant prayers. It provides an opportunity for socializing, exchange of news, and discussions. In addition, the teacher of the balwadi, Surekhaben Patel, organizes mahila mandals--women's groups--and plans activities, such as embroidery, pickle-making, weaving, and basket-making from paper pulp, for the benefit of women and children. Some development activities in fuel use, such as distribution of solar cookers and construction of improved smokeless chulahs, are also undertaken in Jaspur.

Marketing Facilities

Jaspur village does not have a market place or weekly markets. Commodities such as milk, curds, and ghee are sometimes sold by the producers, but very few households have excess milk or milk products to sell. Barter is common. A woman may exchange bajri or any other farm produce she has in excess for the vegetables or provisions she wants. Occasionally, a hawker or vegetable grower may bring his produce to the village to sell. Recently a few enterprising households have opened petty shops dealing with stationary items, vegetables and cloth; however these are not patronized well and the prices are rather high. These shops are resorted to only in times of emergency.

By and large, households in Jaspur village depend on the market at Padra, six kilometers away, for all sorts of goods from vegetables to clothing and jewelry. This town is also quite famous for its gold work. Goods in Padra are cheaper and of better quality than those in the village shops. For special items, such as ceiling fans, blankets, pressure cookers, and ready-made garments, the villagers go to Baroda.

Credit Facilities

Rural households have very low per capita income and often have to resort to loans. Social ceremonies at marriages, births and deaths make inroads into the purse of the peasant and compel him to incur debts. The uncertainty of

agriculture and poor harvests drive the farm household to procure loans to finance farming operations and often living expenses, as well. The facilities available for borrowing are private lenders, a bank, and a cooperative dairy. Farm households often obtain loans at Padra by pawning gold and mortgaging land. The rate of interest is two percent per month.

Facilities for Saving

A private bank and post office are functioning in the village for the benefit of rural households. These offer facilities for depositing savings for specified terms.

Tea Shops or Snack Corners

There are no tea shops or snack corners of repute in the village, but refreshments are served to visitors to the panchayat office in a temporary structure. A mobile snack shop also caters to the needy. A banyan tree provides a venue for men to idle away free time. The bus stop is also nearby.

Physical Appearance

The houses in Jaspur village are located in clusters along bylanes of the main street. Beside the entrance to the village stand a number of houses constructed under the Minimum Needs Programme for rural, landless, and poor households. Most homes in the village, except a few belonging to the higher castes, are semipermanent or temporary structures. The houses are owned by their occupants. Size varies according to socioeconomic status. Most are poorly ventilated. An essential feature is the veranda in front and a string cot within.

Social and Economic Structure

The village is predominately Hindu, and the caste system is prevalent, although the situation is changing. Intercaste marriages are prohibited and other interactions between higher castes and scheduled castes are restricted. Caste also determines occupation, although not so rigidly as in the past.

Land Ownership and Rural Households

The village has landless laborer households, marginal farmers (less than one hectare of land), small farmers (one to two hectares), and a few large farmers (more than two hectares). Some are tenant farmers. Most property is inherited and passed on from generation to generation.

Households are by and large patriarchal, patrilineal, and patrilocal. Sons are considered important and indulged. Daughters are a liability and often seen as help to mothers in housework. The household structure is either joint or extended families--usually consisting of parents, unmarried children, and married sons with their wives and children--or unitary (nuclear families). Land becomes a cohesive force holding the family together.

Economic Conditions

The main occupation and mainstay of livelihood of households in Jaspur village is agriculture. Occupational structure in this village has undergone radical change in recent years. Some households have shifted totally from

their traditional occupations and some depend on a combination of occupations such as farming, skilled work, and paid employment in nearby villages, towns and cities. Men having jobs in cities may stay away from home or commute daily. Participation of women in the paid labor force is still scanty.

Division of Labor by Gender

Gender differences are obvious in the work sphere in Jaspur village. Among the higher castes in the village it is not customary for women to work on farms or take paid jobs, and, in spite of changes taking place, men do not allow them to do so. Among lower castes women have to work to make both ends meet. They work as hard as men to feed the family, not only in their own fields but even in others' fields on a daily wage. Women are given the most onerous, labor intensive, low technology tasks. These women workers have to shoulder dual roles, that is, that of housewife and of contributor to household income. Women in the higher castes look after the household and take care of domestic animals. Women have little power in decision making in financial matters, other economic matters, or matters concerning their own children.

VISITORS VIEW A VILLAGE

by

Ellen C. K. Johnson and Navaz Bhavnagri⁶

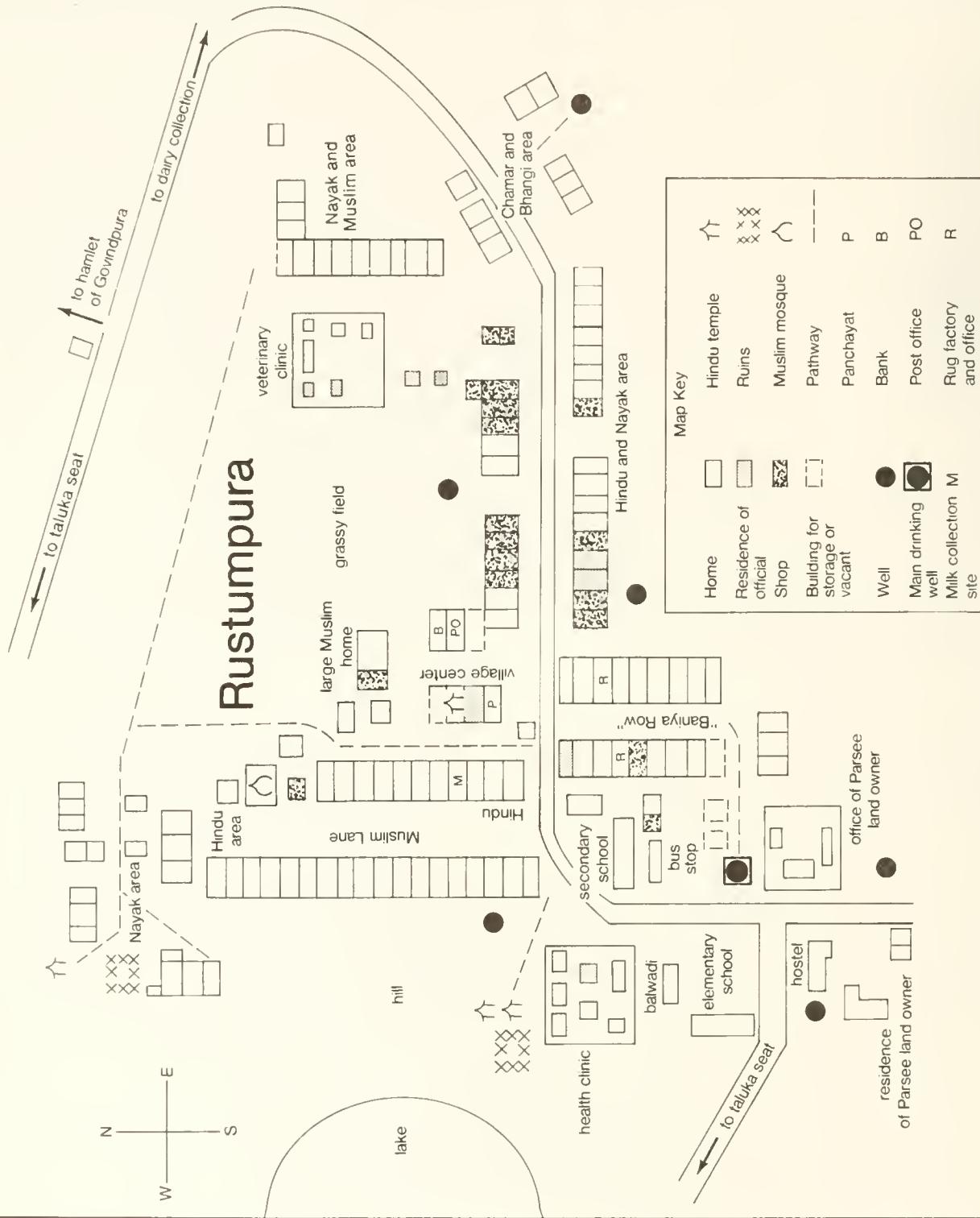
By 5:00 A.M., crows cawing from the trees near the bus stop herald the beginning of a new day in Rustumpura village. Soon, lights go on in many houses, for farmers get up early, and there are also men who commute daily to work in Baroda on the 5:45 bus.

Six to eight buses stop in the village each day, as well as a truck which comes by, radio blaring, to take the overflow of passengers. Many people go to shop in Valghodia, the largest town in the taluka. Farmers come to the village to buy fertilizer and load it atop the bus for the trip home. Rustumpura is a transportation hub for the surrounding area.

North and east of the bus stop, along the main street in the village, there are shops, many run by Baniyas (a Hindu subcaste) and some by Moslems. Branching off from this street are lanes along which are houses, many of mud brick covered with plaster, but some of mud and dung over sticks. Many houses have beautifully carved wooden doorways and doors. Their roofs are red tile, made by the village potter and his son. The tiles are laid over tin or sticks. Along the walls of the homes, brush and wood are stored to use for cooking. Almost all of the homes are in excellent repair and are kept clean and neat.

The village also has about half dozen wells, two of which, the harijan well at the east end of the village and the sweet water well near the bus stop, are used for drinking water. Others are used mostly for laundry. One Baniya family, though, has a small-bore well and pump in their home.

6. The text is authored by E. Johnson, based on information collected with assistance from N. Bhavnagri and S. Shukla. The map was prepared by N. Bhavnagri.



Map of the village of Rustumpura, Baroda District, Gujarat, India.

Nearly every household in the village has several animals--goats, a cow or buffalo, or a pair of bullocks to pull the plow or a wooden cart. Between 6:00 A.M. and about 7:30 A.M., and then again between about 5:00 P.M. and 6:30 P.M., there is a lot of activity with animals. Many people tie the animals outside their houses at night, though some have animal sheds beside or within their houses, for cattle theft can occur. Morning and evening, the animals must be watered and fed and, for those with milk, milked. During the day, the animals are taken to graze at the edges of the fields, or to the herdsman near the lake, who charges about ten rupees a month to watch an animal. Milk not needed by the household is usually sold to the Baroda Dairy at a collection point in a village house. Both buffalo milk and cow's milk are collected and the dairy keeps a record of the contribution of each family and the milk's fat content. Some of the animals in the village are being purchased from the dairy through the milk they give. The milk is chilled in Bodeli and then transported to Baroda. At about 7:00 A.M. and 6:45 P.M. daily, the milk collection truck, cans rattling, passes through the village.

Providing fodder for the cattle is sometimes a big problem, especially in the dry season or when the monsoon is late. Collecting it from the scrub forest or from the grasses by the roads is usually the job of women and girls. Because there are so many cattle in the village, most backyards, which usually contain vegetable gardens, are fenced in with cactus hedge. Cattle which roam into fields and eat crops may be impounded and their owners fined.

Also, in the morning and late afternoon, women in colorful saris and girls in blouses and long skirts pass back and forth from the sweet water well. They move gracefully, balancing clay and metal pots of water on a cloth ring on their heads. All the villagers except the harijans get drinking water from this well.

Women also wash clothes in the morning, slapping them with a paddle at the other wells or at the edge of the pond. Most do their own household's laundry, but many Baniya families and some others hire women from land-poor, low-caste households to wash clothes, fetch water, wash pots and pans, and sweep floors.

A woman may work for four or five households, earning 20 to 30 rupees per month from each. Some households also hire a sweeper for about five rupees a month to clean out drains. Lower-caste women also do agricultural work, either for their own family or in the fields of others, as exchange labor or for a daily wage. Muslim women, however, generally stay home, although some help their husbands in shops.

Women and men share household authority in most cases, but women do most of the cooking and men the heavy plowing with bullocks. Women also do house-cleaning, including tidying the area where the animals are stabled. Both men and women take care of children, but women usually tend small infants. Women gather fodder for animals and firewood; men may bring in wood in large chunks and chop it up. Either men or women may milk animals.

Men do carpentry repairs, deal with the veterinarian, and market crops. Women repair mud and dung homes, mend clothes, and wash dishes. Often the children, especially the girls, help the women with their work. Older boys help their fathers. Husbands and wives seldom show affection for each other

in the presence of others, although there is a great deal of love and respect between them.

The primary crops grown in this area are cotton, the regular variety, or a hybrid one which is more productive but requires more fertilizer, pesticides, and labor; jowar (sorghum); and dangar (rainfed rice). Some bajri (millet) is also grown, as well as toor dal (lentils) and pulses.

Poor farmers eat mostly jowar rotlas (thick unleavened pancakes) but others may eat wheat flour chappatis (thin unleavened pancakes), toor dal and dangar rice (often mixed together into khichdee), onions, and potatoes. Shopkeepers eat a more varied diet, with vegetable curries and fruit. Only a few villagers have kerosene stoves for cooking; most have chulahs (mud and dung stoves, many of them "smokeless"--with a pipe) and burn wood, brush, or dried cotton plants.

In the crop cycle, cotton is sown at the beginning of the monsoon. Jowar is then sown; the cotton is picked; and the jowar is harvested afterward. Jowar makes less profit but has less labor cost and is less easily stolen.

Now that many people are having smaller families and there are other employment options (e.g., working in town or city), it is not always easy to find agricultural laborers, particularly for hand weeding during the monsoon. Men plow, women help put in the seeds, both men and women weed the crops using small metal knives, and all harvest. Women often take small children to the fields and care for them there. Older children help with weeding and picking cotton before and after school and on holidays and Sundays.

Cotton is sold in the towns and processed there. Jowar is usually dried in the sun and then trampled and winnowed (by the breeze or by flapping a large sheet).

Those who do daily agricultural labor for others are often in the fields from 8:00 A.M. until 6:00 P.M., with several hours off at midday to eat and rest. Those who work their own land can have more flexible schedules.

Much village land is controlled by three men--a Parsee, Mr. Dalal, whose forebear founded the village; a Muslim; and a Baniya, who doesn't own so much land but who controls land pledged as security for loans. These men manage land, hire agricultural laborers, and market crops. Some smaller landowners also hire laborers to do farmwork. The village middle class are shopkeepers, artisans, and some farmers. Below them are many laborers, who may own a little land but who derive most of their income in farm work or as servants.

An agricultural cooperative in the area serves seven villages. Its two officers assist people in loan or seed applications to the government. Most agricultural loans come from the Central Cooperative Bank of Baroda in Valghodia.

The village of Rustumpura has a balwadi (preschool), primary school, and secondary school, as well as a mosque school for the religious instruction of Muslim children. The preschool teacher lives in the village with her husband, a blacksmith and carpenter, and their three children. A free lunch for children of scheduled castes and tribes is served at the school. This program

was begun just before the election when Rajiv Gandhi became Prime Minister, but the lunch is prepared by low-caste women and so most Baniya children go home for lunch or bring their lunches.

During this season (monsoon), school is in session 11:00 A.M. to 5:00 P.M., Monday through Friday, with a break at 2:00 P.M. for lunch. On Saturday, school goes from 7:00 to 11:00 A.M. Children sit on the floor in neat rows and write on slates or papers. There are seven classrooms in the school building. The eighth class meets on the veranda of the office bungalow of Mr. Dalal, the principal landowner.

The secondary school has similar hours. There are nine class periods and an assembly period, when Hindu prayers are said and the Muslim boys can pray. Students study science, mathematics, history, geography, Gujarati, Hindi, Sanskrit, and English. The teachers are men. There are many more boys than girls in the secondary school, although a large group of girls come from a nearby village, Malu, which, they say, is much larger than Rustumpura.

Many secondary school boys, up to 55 at a time, live in the hostel near the edge of the village. The government sends groceries for them and pays for a cook and houseparents. The boys help clean their dormitory, grow some vegetables, and help with meals, as well as study. Some go home on weekends. Their home villages do not have easy access to secondary schools, and a certain percentage of them must be scheduled caste boys. There are 12 such hostels in the Baroda district.

The balwadi meets every weekday morning and children play learning games and practice their letters and numbers. The mosque school meets from 9:00 to 10:00 A.M. on weekdays and both boys and girls study Arabic and the Koran. Girls attend only prior to puberty. The mosque is also opened if people want to pray. (Men may pray at the mosque; women pray at home.)

The health clinic, open weekdays at about 9:00 A.M., has a resident doctor. He doesn't always stay overnight in the village, as his family lives in the city. There are four male and four female nurses associated with the clinic, who go out to the forty villages in a 16-square-kilometer area, trying to get to each once a fortnight. The most common illnesses are anemia, malaria, diarrhea, dysentery, bronchitis, pneumonia, tuberculosis, acidity, and ulcers (mostly from drinking). People chiefly go to the clinic for common ailments.

They can also go to hospitals in Baroda or to a private Registered Medical Practitioner in Rustumpura who has been in the village five years. He dispenses medicines, gives shots, and stitches up cuts and small wounds. Surgery and more serious diseases he refers to the hospital in Baroda. Upper class people have the private doctor come to their homes.

The health clinic includes a maternity center. Some women deliver their babies there, but more prefer to deliver at home. They may be assisted by a local dai, a Muslim woman trained in midwifery. Some are afraid to go to the maternity clinic because they fear that birth control operations will be forced on them.

Families are smaller now than a generation ago. Three children are now the norm instead of five or six, although many Muslim families still have five or six children. With better health care and vaccination programs, infant mortality has dropped.

There are not such good facilities in the village for eye care, hearing, or dental care, though in the past eye clinic camps have been held. Many people's eye problems were dealt with then by operations. For some illnesses, many go to local bhuas, religious practitioners.

The veterinary clinic in Rustumpura, established in 1943, serves 34 villages. It is the only veterinary clinic in the area not located in a taluka seat. The government veterinarian, who lives in Rustumpura, sees 10 to 12 cases each day and makes two to three emergency visits.

The most common problems with cattle involve calving, bovine tuberculosis (which is why milk is boiled), blood parasites, and lung and liver infections. This year, 1985, as the rains were late and fodder was scarce, there are many malnourished cattle. Cooperative dairy officials also visit the village every fifteen days to care for the animals people are purchasing from them.

In July 1985 a small weaving factory was established in the village. This government project employs a supervisor and ten instructors. It is training boys and girls, 10 to 17 years of age, from Rustumpura and nearby villages to make expensive wool rugs, which will be exported. Some have gone through the fourth or fifth standard in school. They will train one year, be paid 150 rupees for the last six months, and then be absorbed into the factory at a wage of 15 rupees a day. The children are Barias, Tadvis, Nayaks, Patans, and Muslims. Four looms are now in operation; there will be ten eventually. The children are supposed to work from 8:00 to 12:00 A.M. and 1:00 to 5:00 P.M. daily, but only a few were there at any given day, since many must weed in the fields this season.

Rustumpura also has a variety of shops and other facilities. One of the Baniya leaders rents space to a branch bank and to the post office. The post office employs a postmaster, clerk, packer, three agents who carry mail to branch offices, and postmen. This post office is suboffice for thirteen branch offices in other villages. The mail comes by bus at 8:15 A.M., is sorted, and then delivered between 10:00 A.M. and 6:00 P.M. Postmen use bicycles to carry mail to other villages. There are from 20 to 60 letters to a village per day.

About 20 to 25 letters go abroad from this post office each month. Though the largest volume of mail through this post office is within Gujarat, the next largest volume is correspondence with other countries, and especially the U.S.A. and Britain, rather than with other parts of India.

In the central village area, near the bank and post office and next to the sand pile on which the children play, is located the panchayat building, which also serves three other villages. They are: Ghoda, with twenty households of Barias; Koba, with four or five Nayak households; and Bhanpura, with thirty to forty households.

The panchayat meets monthly. Its members are elected from the total population of the area. The present sarpanche (head of the panchayat) is a Baniya from Rustumpura. To be head, one must know people in the other villages and in Valghodia and Baroda. In the panchayat building are kept revenue records, land and house registrations, electric records, budget amounts, and talati records of births, deaths, and so forth. The talati, a Kacchia, also collects taxes. The panchayat hires a sweeper to clean the streets.

Villages in this area also have a gram sevak, a person appointed by the taluka panchayat at Valghodia. He is responsible for giving advice on pesticides and fertilizers, crop diseases, and farming methods. Officially, there is a mahila mandal (club) for ladies, but it is not very active here.

The village's security is handled by the Valghodia police office. There had been a policeman living in the village, but he moved away in August 1985. There are supposed to be two police patrolling the village each night, but Mr. Dalal has hired his own guard for his property and crops, and several Baniya families have hired a watchman, who wakes them nightly to check for security. Several Baniya homes now have burglar alarms on the doors. In the most recent burglary, the burglar broke through a window and wall, not through the door. Things which are stolen include: clothes, gold, money, shop goods, grain, potatoes, crops (especially cotton), goats, and cows.

During the morning and late afternoon, the village flour mills chug away along the main street. There are three, two electric and one powered by crude oil. Women walk from other villages with grain to be ground and men come on bicycles to purchase goods.

The shops along the main street are shallow (10 to 12 feet deep), built of wood and plaster, and open to the light and air, which saves on electricity. Goods are displayed prominently. In one shop bicycle parts and electrical equipment are hung; in another clothes hang in front. Tailors make clothes in view of those strolling by. Another lane of shops is along the side of the veterinary clinic wall. Most shops on the main street are owned by Baniyas, some by Muslims. On the other lane, the majority of the shops are owned by Muslims. There is also a small shop near the mosque, on a lane where Muslims live.

One shopowner told us that about two-thirds of his business is from people coming from the ten or twelve villages within three to five kilometers of Rustumpura. In their villages, only goods worth 10 to 15 paise (less than a rupee) are sold.

In all, there are two vegetable shops; six general provision shops, selling rice, flour, dal, dried chilis, potatoes, onions, incense, dried snacks, matches, candies, soap, and dried fish; two machine and cycle shops; three flour mills; a general store, with pots and pans, rubber sandals, and so forth; a cloth and clothing store; a tea shop run by a Brahmin family near the bus stop; the health clinic; a fertilizer shop (fertilizer is sold in other shops as well); and nine tailors, most of them Baria jati.

One tailor has an apprentice, a young boy from another village. Most of his business is from outside the village. His wife also helps, doing the hand

work. He has a seventh standard education and owns no land. He uses a foot treadle machine and can make four to six garments a day.

Other craftsmen work at home. The village blacksmith has a forge at his home. His heaviest work comes before and during the monsoon, when he repairs plows and sickles. Sometimes he works every day, sometimes not in a week. He also does carpentry, repairing carts, making bed frames, cupboards, or constructing and repairing houses. He made many of his own tools.

There are three village barbers who either cut hair at their homes or at the homes of their clients. The barbers are Tadavis, and are a father and son plus one other man. They usually charge two rupees for a haircut.

The village potter works at home, too. The potter and his father own two donkeys, and during the monsoon, when they can't make new pots, they take pots and tiles on the donkeys and market them in villages up to 20 miles away. The pots are often painted, and the potter's wife may help with this. They are then fired in the open, using wood as fuel. All the pots are made on a wheel. Black and red clay are mixed to get the proper blend of stickiness and tempered material.

There are no dhobis (washermen) in this village but some are in nearby villages who may be hired. The cobbler in Rustumpura chiefly makes shoes for his own family, but also mends sandals or harness for others.

In terms of social status, villagers define themselves in one of four groupings: Anaya, the highest--about half of the households, many of them Baniyas; then a group of six households with slightly lower status; next, the jatis of those who were originally tribal, as Nayaks and Bhils; and, finally, the harijan jatis. There are also status differences among the Muslims, with some considering themselves descended from Mughals and others considered to be low status Hindu converts to Islam. All villagers speak Gujarati, though some Muslims use more Hindi words, and villagers with more schooling know some English.

There is a wide range of wealth in the village. One Muslim family, who owns the large house near the bank, lives in London. Many of the poorest villagers are also Muslims. Many shop-owning Baniyas are well-off and are concerned about theft. One shop was robbed of 6,000 rupees worth of goods and several homes have been broken into. Many villagers, however, own little or no land, no shop, and are poor.

Location of homes is related to wealth and jati status (caste). Most of the more prosperous Anayas live along the lane behind the bus stop ("Baniya Row"). Most Muslims live along the wide lane (Muslim Lane) north from the high school. The harijans live at the east end of the village. Many Nayaks live on the northwestern rim. Bhils, along with a few Nayak households, are in the hamlet of Govindpura. We were told by one young Muslim girl that it was very dangerous for us to go to Govindpura, even in daytime, because we might be robbed on the path.

The children of different jatis appear to be uncertain about the reactions of people in other jatis. Neighborhood interactions usually take place among people of similar social class. Baniya ladies may move back and

forth on the row chatting, and the Chamar families move in and out of each other's homes, holding each other's babies and chatting together.

Village homes, whether of brick and cement (pucca) or mud and dung (kaccha), generally have a front veranda where people may sit, a front room inside for entertaining as well as for sleeping, an inner room where goods are stored, and, at the back of the house, the kitchen and shelf for storing water pots. Behind homes are areas for washing pots and bathing, storing wood, and growing some vegetables.

The village has a small mosque at the side of Muslim Lane near where the fakir (Muslim leader) lives. Muslim men gather there for special prayers or during holy festivals and holy months.

There are also four small Hindu temples, with the main village temple located next to the panchayat. Villagers gather there at festival times for prayer and darshan. Two little temples near an old well between the health clinic and the lake are for worship of local deities--Babajidada (honored father or father-figure) and Mataji (mother). There is also a Hanuman (monkey god) temple at the northwest edge of the village near a hill. Only men and boys pray there, usually on Saturday morning. They offer oil, coconuts, flowers, and some of the red color which married women wear in their hair. Most Hindu worship, however, is done at home during the daily or twice-daily puja (worship), when a lamp is lit and incense burned.

Just outside the village, about a fifteen-minute walk away, is the Durga, a holy place. There are several stories about it. Some say a nine-foot saint is buried there. Others say the grave is nine feet long because nine Muslim men were martyred saving Kali, a Hindu goddess.

A Muslim holy man from Anand comes to the Durga every Thursday to pray with and for people. He gives them Arabic prayers written on slips of paper which people sew into little bags and wear around their necks. This holy man has a large following in the region, among Hindus as well as Muslims. People even come from the towns to see him. Sometimes, groups rent tourist buses and come on pilgrimages. One man, as a good work, is building a mosque over the long grave. Villagers in India, both Hindus and Muslims, make pilgrimages to holy places. Some Rustumpura Muslims have been as far as Rajasthan on pilgrimages.

Toward the end of the afternoon, animals begin to return from grazing. Women and girls throng the well area. The animals are given fodder and milked, and extra milk is taken to the dairy. People from the fields bathe. Men may sit in groups outside, smoking and chatting. Children play in the street, wheeling wire toys, rolling a hoop with a stick, riding bikes, or playing in the sandpile near the panchayat building. Men bring the teams of cattle home from the fields, unhitch them, feed and water them. Women pick over grains and cook the evening meal. Shops turn their lights on and do a booming business as people spend the money they have earned for the day's work and as families buy additional food items for their dinners.

7. Darshan is the spiritual benefit that comes to a person who has been in a holy place, who has related to a holy person or participated in a holy ceremony. Darshan comes from seeing, from being there.

By 7:30 or 8:00 P.M., twilight is upon the village. People have eaten and the women are washing the cooking vessels. People relax in the cool gray of the evening. Some walk up and down the streets. The shops have closed. Some men climb the neem tree in the secondary school yard and cut branches to burn to keep away the mosquitoes. Lights are on in most of the houses (those with electricity). The animals are checked or brought inside the enclosed area next to the family's living quarters. The front doors are closed and bolted, and by 9:00 P.M. the village has gone to sleep. The crows again caw. The day is ended.

VILLAGE HOUSEHOLDS

by

Ellen C. K. Johnson and Smita Shukla

Domestic households function as small social systems within which members transact the relationships and activities of their lives. They are generally economic as well as social and residential units and are a very important part of the local context in which women, as well as men, live and work. In much of India, sons inherit land and family wealth, so sons live with or near their parents and the son's wife (or wives, for some Muslims) comes to live in her husband's home. Often, there are three generations living in the same house, and brothers may work together in farms or businesses.

Who lives in a household, and what the particular household activities are, however, depend on many things--wealth, amount of land owned, the status to be maintained, who needs special care (e.g., elderly or small children), who gets along with whom, house size, ages and sexes of the people, and other situational factors. Each household follows strategies to balance its needs with its resources to "get by," and, hopefully, to "get ahead." The following case studies tell of some households in Rustumpura village.

The Baniyas⁸

The Baniyas are a primarily shop-owning jati (subcaste) found widely in Gujarat. When Rustumpura was founded, several Baniyas from Bahadarpur (16 or 17 kilometers away) came to set up shops. All of the Baniya families in Rustumpura today are related to each other and also keep in touch with relatives from Bahadarpur. Most have some relatives, also, who now live abroad.

Vithal bhai Sheth is the grandson of one of these Baniyas who came with Mr. Dalal. He and his wife Madhukanta, in their late fifties, had five children, three of whom still live in their household. Their two older daughters, Harsha, thirty-five, and Jyotsna, thirty-three, live in Halol and Baroda, respectively, with their husbands. Harsha's husband is a wholesale grain and seed dealer and Jyotsna's a government worker. Jyotsna herself is a primary school teacher, having finished twelfth standard and then a teacher training course.

Mr. Sheth's elder son, Ashok, thirty, has a bachelor's degree in commerce and his wife a secondary school education. This son works in his father's flour mill and other shops in the village. Ashok's wife, Vashumati, and two sons, age eight (fourth standard) and five (first standard), live in a house

in Baroda owned by Vithal bhai. The boys go to a good private school. Ashok visits his wife and sons on weekends; through the week he stays with his parents in the village. During school vacations, his wife and sons come to live in Rustumpura.

Vithal bhai and his wife have two other children. Nayana, twenty-four, has passed the tenth standard though she is slightly handicapped. She helps her mother at home. Sunil, age twenty-one, was educated to the twelfth standard and now works in a family shop in the village selling general provisions, such as grain, cereals, soap, and tea, as well as fertilizer.

Besides owning several shops in the village, a flour mill, some village houses and buildings (several of which he rents out--e.g. to the bank and the post office), and property in Bahadarpur and Baroda, Vithal bhai also owns seven acres of land planted in hybrid cotton and jowar. In addition, he oversees farming operations on other acres of land pledged to him as security for loans. He owns a pair of oxen for farmwork. He has a servant to go around each morning and hire farm laborers.

In the household, his wife cooks, helped by Sunil. Nayana maintains the house and begins the laundry (soaps the clothes). A servant is hired to get drinking water, finish the laundry, wash pots and pans, and do some cleaning. Vithal bhai oversees the shop operations, the farming, and is one of the village leaders. He is the elected head (sarpanche) of the local government body, the panchayat, selected because he has good contacts in surrounding villages as well as in nearby cities.

Another Baniya household in the village is that of Champa ben and her husband, also named Vithal bhai. She is thirty-five and he is thirty-seven, and they have been married for ten years. Her family was poor, so she has only an eighth standard education. She is eager for her children to be better educated than she was and is concerned about the quality of the village schools. Her husband has a secondary school education and some technical training. He and his elder brother run a large provision shop in the village and share profits equally. They don't own land in Rustumpura.

Champa ben and her husband have three children, two girls--Dipika Shah, nine, and Vayishali, five--and Depen, a ten-month-old son. The elder daughter is in the fourth standard and the younger in the first. Vithal bhai was very glad when Depen was born because he wants sons to help in the shop; Champa ben, however, thinks three children are enough.

She gets very tired with the work of caring for an infant. She also cooks, including more complex dishes than usual in village households, cleans house, and helps the children with their homework. The house, of cement, brick, and tile, has a pump, latrine, and bathing room indoors, as well as a water filter, ceiling fan, and other electrical items.

The shop, on the main village street, is open from 7:00 A.M. to 7:00 P.M. Her husband has tea before going to the shop, comes home for lunch at noon, and has dinner after closing the shop. The children eat before school, come home at 2:00 P.M. to eat, and have dinner in the evening.

When Champa ben goes to visit her family, as she did recently, to attend a celebration and make offerings to her family's pujari (Hindu priest), and as she did for two months when Depen was born, her husband's brother's wife cooks meals for Vithal bhai and helps care for the older children. Almost every afternoon, Champa ben bathes and dresses up the baby and they walk up the lane to visit with her sister-in-law. Sometimes the sister-in-law comes to help with the baby or with cooking. On very special occasions, such as Divali, both brothers may close the shop and take their families to Bahadurpur, where two other brothers live and where the four brothers together own a large house with a shop below.

In both of these Baniya families, there is cooperative management of businesses by the males. In the first instance, the property has not yet been divided and is owned by the father. In the second, it has been divided mostly among the four brothers. The two brothers in Rustumpura jointly own the shop there. Both households also own property elsewhere.

In the first household, the grandchildren live elsewhere (in Baroda) because of schooling, and their father commutes. In the second family, the brother's children, who are older, go to school in town. Both households maintain close connections with relatives in other places. Both live in cement houses, have electricity and other conveniences. Both employ servants.

The Muslims⁹

The Muslims constitute almost one-fourth of the population of Rustumpura. The majority are land or shop owners, a few work in offices or industries in nearby cities, and a few are landless laborers. Four to five children per couple is average. Women of a household socialize only among themselves and immediate neighbors. Most do not participate in agricultural work, but some assist in shopkeeping if the family owns a shop.

Rehana bibi is a thirty-year-old woman who belongs to the Garashia subcaste of the Muslim community of Rustumpura. She was educated up to the fourth standard in a municipal school in the Jhagadia town of Broach District in Gujarat, and was then married at sixteen to Kalokhan bhai Garashia.

Her husband, now thirty-five years old, has been living in Rustumpura since childhood. He studied at the primary school until the fourth standard, then dropped out because of the unexpected death of his father and later of his mother. His parents' properties, except for the house they lived in, were seized by other relatives after their death. He and his elder brother had to fend for themselves.

They still live in that same house, but are no longer on speaking terms and have built a wall inside the house to separate the two families. Legally, the house belongs to the elder brother. Their family includes Kalokhan bhai's uncle (his father's brother), who lives next door.

Rehana bibi and Kalokhan bhai have a ten-year-old daughter Zarina bibi, in the fourth standard, a seven-year-old son Ibrahim Khan in the second standard, and a three-year-old son Hanif Khan, a preschooler. The couple feels it is necessary to educate their sons to the limit of their capacities

in order to qualify them for better job opportunities. Their daughter, however, may have to drop out after the fifth or sixth standard. They say they cannot afford the cost of educating so many, and, anyway, their daughter will be married eventually and become a housewife. Also, she is in poor health, and, if she does not live long, all the education would be a waste. Until she is married, she will help them manage their small shop across the street and is thus an asset.

Their shop is now the only source of income for this family. A few years before, in a major theft from their house, practically everything was stolen--gold jewelry, utensils, grains, clothes, and even the broomstick. This, coupled with the split with his elder brother, put Kalokhan bhai in a financially critical position. For a time they cut firewood to sell to people. A year ago, when they had saved some money, they rented this shop.

The shop is a small one. Light and ventilation are provided naturally, because portions of the mudcaked walls have been broken down by the seepage of rainwater. Dry shrubs against them keep the walls from collapsing. Heavy neem tree logs and sheets of iron covered with mud tiles form the roof.

A varied range of goods is available, from vegetables--green chilis, potatoes, onions, garlic, and string beans--to edibles, such as biscuits, dry toast, peanuts, dalia, peppermints of different kinds, dry masalas, such as chili and tumeric powders, salt, and mustard seeds. Other items are slippers, rain shoes, bidi leaves, funnels, sieves, strainers, brushes and soaps for washing clothes, small tins for oil lamps, brooms, match boxes, and rubber bands--all in small quantities. Most of the items have to be brought home each night because of the risk of burglary.

Rehana bibi manages the shop while her husband is away, every other day, purchasing goods at nearby towns. When he is in Rustumpura, he takes turns with his wife sitting in the shop.

The income from the shop is just about sufficient to provide them with a single pair of clothes and two meals a day. Business varies from a meager 15 rupees to a good 100 rupees per day, depending on the season. Sixty percent of this is spent in buying the products to sell.

Receipts are higher after the harvest, because people have more money to buy and to pay for goods bought earlier on credit. Yet even in that season, the margin of profit is not high, because they have to pay off their debts to the wholesaler. They must also pay a rent of 15 rupees per month for their shop, which belongs to the chief priest of the mosque at Rustumpura.

Often, when under financial strain, they are offered help from Rehana bibi's father or younger brother in clothes for her and the children or some "ready cash" money with which to buy milk, flour, and other items.

In many respects this family is different from other Muslim families in the village. Most Muslim women (especially from agricultural families) prefer keeping house to assisting their husbands in their jobs. Rehana bibi feels that if she stuck rigidly to such conventions, her husband would find it extremely difficult to manage the shop as well as go to other villages to buy

goods. Other Muslim women in the community may help to manage a shop owned by their husbands, but don't work there as a full-time responsibility.

Rehana bibi's family differs from other Muslim families also in their decision making patterns. Contrary to most families in Rustumpura, in which the man's decision is the last word, this couple consults each other on management of finances, buying of household or shop goods, choice of food and clothing, and education of their children.

They live in a modest two-room house with a veranda and a backyard. Both the rooms are heavily utilized for storing and stacking household goods. In a corner of the second room is the cooking area, separated from the front room by a low-walled partition. They had a smokeless chulah earlier, but the pipe broke down during a monsoon a couple of seasons ago, and they make do with it as it is. They also have a platform in a corner for water pots.

Beyond this room is a small veranda which opens into the backyard. They have a small bath place covered with dry shrubs in the backyard and also a latrine provided by one of the benefit schemes of the government. They used to grow their own vegetables in their backyard like most families here, but because the wife had to be at the shop nearly the whole day, other people's goats and cattle trespassed and ate up everything despite the cactus hedges. Now they grow nothing.

Very different from this family is that of Karim bhai Sultan, who also stays in Muslim Gali (Lane) but enjoys a position of high social status because his late elder brother was the sarpanche (mayor) of Rustumpura. He is thirty-eight years old and educated up to the seventh standard, but did not continue because there was no secondary school in Rustumpura in those days.

Naseem bibi, twenty-one years old, is his second wife, the first having died five years ago. His son Makbul, twenty-three, works at the carpet industry in Rustumpura and is married to Sharifa bibi, twenty-one. His second son, Yasmin, fifteen, is in the seventh standard and his third son, Salim, twelve, is in the sixth standard. One of his daughters, Khalima bibi, nineteen, is married and stays with her parents-in-law. His second daughter, Sareen bibi, four, is his second wife's child. The family also includes his two surviving brothers and their families.

The entire extended family shares a large house partitioned by walls into several living areas, but with a common veranda. The family is divided into households for economic purposes, but otherwise are like a unitary family. Karim bhai's elder brother has two wives and eight children, of whom two daughters and one son are married. His younger brother is also married and has three children.

Karim bhai's family is basically an agricultural one. He has about ten acres of land on which he grows cotton, toor dal, jowar, and rice. This land legally belongs to his elder brother, who inherited about 12 hectares from their father, but allows four hectares each to each brother to farm for themselves. Karim bhai does not pay his elder brother rent nor share profit out of the produce as in the case of many families in the village.

Because of his family's prominent social status and comparative wealth, he is granted loans by the government on conditional lease of land to the bank, and in case of crop failure the time period for repayment is increased. His resources enable him to tend his fields adequately. He sprays insecticides, uses chemical fertilizers, and hires laborers for sowing, weeding, and harvesting. The yields are good, providing an average profit of four to five thousand rupees per season.

The activities in Karim bhai's household are role specific. The men are engaged in agricultural work, which varies according to the season, and the women keep the house, which includes fetching water, washing clothes and utensils, cleaning and milking cattle, cooking, and so forth. Karim bhai spends most of his days in the fields. His leisure time is spent gossiping with his friends and relatives--often drinking and smoking bidi (cigarettes). His wife and daughter-in-law spend their leisure time chatting with the women of his brothers' families in the common veranda. The women never go out unescorted. Even the household shopping is taken care of by the sons. Karim bhai takes complete responsibility for all decisions, whether they pertain to agriculture, education of children, or household expenditure.

Although they observe a strict social code, among themselves they indulge in a good deal of joking. Karim bhai and his elder brother's wife tease each other endlessly, he and his brothers make sly comments and jokes about other family members, and the children tease and play with each other. The women do not wear the typical costume of Muslim women but wear saris, such as are worn by other Gujarati women. The daughter-in-law maintains "avoidance" of her father and uncle-in-law; however, she roams freely around the house in their presence.

Karim bhai, being fond of good food, asks his wife to cook mutton every three or four days, together with jowar chappatis, vegetable curries, khichdee and dal. Their milk supply comes from their own cattle. They have a cow, a buffalo, a goat, two oxen, and one calf. They also supply a fixed quantity of milk to the dairy.

The house that Karim bhai lives in is high-ceilinged, sturdy, and has electricity. His family occupies two large rooms and shares the common veranda. Neatly stacked against the walls are found large drums for storing grains, fodder for the cattle, and built-in cupboards for small objects and possessions. The kitchen is located in the far end of the second room, which opens into the backyard where they grow their own vegetables, such as long and bitter gourd and beans. In front of the veranda is the cattle shed.

The Nayaks¹⁰

The Nayaks are a scheduled jati (subcaste), sometimes considered tribal and sometimes just low caste. They were originally brought to the village by Mr. Dalal to do agricultural labor. Some own a little land. Their numbers have increased in the village, both by birth (they tend to have large families) and by additional immigration. The oldest man in the village, now in his late eighties was, first, a hunter for Mr. Dalal, then a syce (a person who cares for horses), and finally a cook. He is now retired and living on a pension from the Dalals. He lives in a four-generation household with some of his many descendants.

Another Nayak household consists of Vithal bhai Nayak and his wife Chanchal, both in their forties. They had only two children--daughters Partap, twenty-five, who is married to Jayanti, whom her parents treat as a son and who lives in this household, and Suraj, who is married to a man in another village and has one daughter. Partap and Jayanti have five children: Sumitra, an eleven-year-old girl who will be married in three or four years; Suresh, a nine and one-half year-old boy who is in the second standard at school; Saidra, a girl, seven; Ramila, a girl, three; and Sunil, a boy, ten days old. None of the older household members are educated, but Partap hopes that her sons can get some education.

The household owns only a very little land, where they grow cotton and toor dal. They have a small vegetable garden, but they buy most of their food. They don't store food. They have several buffalo (a cow and a calf), obtained through the special program run by the dairy, and they sell milk from the cow when she is producing it. The four older household members, and sometimes Sumitra also, do agricultural labor, usually for Mr. Dalal. They can get this work seven to eight months a year. At other times they do manual labor, such as house construction. Partap and her mother also may work as servants for others.

This household is also fourth or fifth generation descendants from the original Nayak settlers. They don't know where their ancestors came from and have no ties elsewhere. They describe themselves as being from Rustumpura.

Their home is of mud and dung construction with a tile roof and has no electricity. It is located among Nayak houses at the village edge. Vithal bhai has several brothers nearby and they all help each other. Neighborhood children move from house to house in their play. On the walls of this house Partap has painted lovely designs with whitewash. The home has few utensils, but it has a smokeless chula and a ventilation panel from the government. The family bathe in the backyard and have no latrine.

Partap stopped work in the fields a month before her baby was born and will return to the fields, taking the baby, six weeks after delivery. Often she takes three-year-old Ramila to the fields; at other times, Sumitra takes care of Ramila and Saidra at home. The daily earnings are given to Vithal bhai, who decides what is to be bought. Most money goes for food. When the household falls short, they may borrow from Mr. Dalal.

The women cook rotlas and dal and vegetables in the morning to take to the fields, where they work from 8:00 A.M. until noon and then again from 2:00 to 6:00 P.M. In the evening they cook again, sometimes khichdee. The women get water from the main village well morning and evening, and also firewood for the chulah and fodder for the animals. Vithal bhai also helps get fodder. The men usually go out to buy the food and other goods. Sometimes a younger girl who is a relative helps them by getting the water.

These Nayak families tend to live in clusters of brothers. If there is no son, they may bring in a husband for their daughter to be like a son. They have little or no education and own no land or only a little. For income, they are dependent on wage labor, and so, for those months in which they can get such labor, they adjust to the schedule of their employer(s). Often the relation between employer and employees is rather like patron and clients.

They are dependent on him--for small loans, for example--but he is also dependent on them for their labor. Nayaks also work as servants.

The Bhils¹¹

A majority of the Bhils reside in Govindpura, a hamlet one kilometer from Rustumpura and considered part of Rustumpura. All the Bhil families descend from common ancestors. They are a very poor community. Though most of them have small land holdings, their income is never enough to pay off debts. They undertake jobs in other people's fields to make ends meet.

One Bhil household consists of Chatur bhai Bhil, thirty-eight years old. He was educated up to ninth standard, after which he had to drop out to take over the agricultural work from his father. His father and grandfather were among those who had migrated from Nasvadi in 1956 because of a drought. His own native village is Saidal.

His wife, Jaati ben, thirty-five, is illiterate, and his daughter Leela, twelve, did not attend primary school because there is no school at Govindpura and at that time none of the Bhil girls went to the Rustumpura school. His son, Vischalchandra, is fourteen years old and in the fourth standard, but often is absent from school to help his father in the fields. The youngest, Sharmishta, five, does not attend the preschool because she is "scared" of it, and the parents accept her choice. Chatur bhai has a younger brother in the house, with his own room and kitchen, as is the practice in Govindpura. The houses are similar to multi-unit buildings in the city. Chatur bhai's house is low ceilinged and bare, except for a few pots, vessels and clothes. Inside the house is the cattle shed where fodder is also stored. None of the houses in Govindpura are electrified and all have poor light and ventilation.

Produce from his land is Chatur bhai's primary source of income, although he and his wife often work as day laborers to supplement their insufficient income. He is already heavily in debt. He owns about seven hectares of land of which half will be given to his brother when they eventually divide the property. His large land holdings are of little advantage to him because maintenance costs eat up the profits. He also owns a bull, cow, and three calves. The milk produced is just enough for the family's consumption.

Chatur bhai works in the field from eight in the morning to eight at night. His wife brings his lunch, then joins in the work while his daughter does other chores and minds her younger sister.

As head of the household and the eldest among cousins, he has the responsibility for decisions in small matters, such as household management, and in important matters, such as division of property and marriage of children. He also takes care of selling the produce. Where others sell cotton or grain at stock markets and get higher prices, he sells his crop to shopkeepers in Rustumpura itself because he needs the cash immediately.

All work is shared by the family members, though jobs are not assigned. Whoever has time grazes the cattle, collects fodder, fetches firewood and does other routine jobs. Chatur bhai seldom has leisure time, except when it rains.

The Bhils are different from the other groups in Rustumpura in that they not only dress differently, but also feel different and think differently. Most of them are pessimistic about their hard life. The women seldom converse with outsiders or other groups. They are superstitious and have a deep faith in religion; however, they seldom go to a temple because there is none in Govindpura and they have no time to go to Rustumpura to worship.

Other Households¹²

Within the village, there are a number of other Hindu households--two Brahmin (traditionally priests), a Patel, a Barot, and some Barias. A Brahmin family runs the snack shop near the bus stop. Barias have generally been agricultural laborers or servants; here, some own land or animals and some of the men are tailors. In the Prajapati household, the husband is the local blacksmith and his wife, the balwadi teacher. There are also several Kacchia households, formerly petty traders, but here they make and sell leaf plates.

The harijan households are Bhangis (sweepers) and Chamars (traditionally cobblers). The Chamar households here own land and work it themselves. They are a group of brothers who came to Rustumpura only about twenty years ago. They maintain ties with relatives in other villages.

AGRICULTURE

by

Barbara A. Yates and Kalpana R. Paralikar

Overview¹³

India, with a population of over 700 million, is predominately an agricultural country. Agriculture accounts for about half of the gross national product (GNP) and engages about three-fourths of the labor force.

Almost three-fourths of the land under cultivation is planted in food grains. The average size farm is two hectares (about 5 acres). Just over 50 percent of land holdings are one hectare (2.47 acres) or smaller and almost 75 percent are two hectares or smaller. Average holdings in India vary from 0.4 hectare for "marginal holdings" (below one hectare) to about 18 hectares for "large holdings" (above ten hectares). Over the past two decades food production has barely kept pace with population increase, about 2.3 percent annually for India and 2.6 percent in Gujarat State, the highest in India. Moreover, despite possessing one of the most extensive scientific research and industrial establishments in Asia, India is one of the poorest countries in the world with a per capita GNP of about U.S. \$150.

Gujarat State, on the western coastline just north of Bombay, reflects the agricultural emphasis of the Indian economy. About 70 percent of the population are rural based, most households being engaged in agriculture and the remaining in village trade or artisan crafts and other support services. About 40 percent of the rural population, mainly agricultural laborers, lives below the Indian poverty line (approximately U.S. \$70 per capita per annum). About 25 percent of land holdings are in the marginal category (less than one hectare) and 10 percent in the large category (more than ten hectares). The

12. by Ellen C. K. Johnson

13. by Barbara A. Yates

average size farm is 4.1 hectares, but varies from district to district. Agriculture contributes about 40 percent of the state's gross domestic product. About 65 percent of the labor force is engaged in agriculture.

The main crops are irrigated paddy rice, wheat, millet, sorghum, maize, groundnuts, cotton, and tobacco. Pulses or legumes (dal) and vegetables are also grown. Crops are grown during three seasons: Kharif or the monsoon season (June-October), Rabi (November-February) and the hot season (March-May). Most crops, however, are produced during the monsoon season. Dairying (cows and buffalo) is also an important source of cash income to farm households. Increases in agricultural production in this drought-prone state depend upon agricultural practices and increased irrigation.

Agricultural production and change are related to village social structure. Social structure is based upon socioeconomic class, caste, kinship, age, and gender differentiations. Most villages in Baroda District include the following classes: (1) large landholders (over ten hectares); (2) small landholders (one to ten hectares); (3) marginal farmers (less than one hectare); (4) landless agricultural laborers; and (5) a small minority who are traders and artisans or render services. Villagers also belong to various castes and religious groups, with Hindus and Muslims predominating.

In general, the different castes, classes and religious groups are integrated in social and economic activities through reciprocal obligations. Caste, however, plays a key role in social and economic relationships, although caste no longer is the sole determinant of occupation. Age is also a factor in social structure and the assignment of agriculturally related work. Young children are frequently kept out of school--the boys to graze livestock and girls to take care of younger siblings.

While women are primarily portrayed in the idealized roles of wife and mother, they play a major role in agricultural production. Women's participation in agriculture is determined by the relationships of their households to the land and by the availability of other wage income. As Sen points out, class and caste affect how gender defines agricultural tasks. While cultural norms encourage Indian women to stay in the home and not the fields, necessity dictates that most rural women, other than those of high caste or class, labor in the fields, where they work as paid laborers or unpaid family labor. At the same time they are responsible for child-rearing, household duties, fetching fuel and water, and health care.

Dairying is also an important agricultural activity in which women play a major role. Women wash and water cows and buffalo, graze them, collect dung for fuel, clean their stalls, gather fodder and feed them, milk twice a day, and carry the milk to the local collection point for sale to the milk cooperative, all requiring two to four hours daily. Earnings are reported to vary from five to ten rupees per day. The income is usually retained by the women to use for household expenses. The only agricultural activity that women appear not to participate in is plowing.

Specific Activities Performed by Women

14 A 1984 pilot study by Patil and Paralikar (unpublished) identified activities carried out by farm housewives, farmers' daughters, and tribal and

backward class women in Gujarat State. In soil management, the predominant activities of women consist of helping in taking soil samples, packing them for sending to the laboratory for soil testing, preparing soil for sowing, and tillage. In crop production, women are involved in sowing, which calls for selection and treatment of seeds and administration of fertilizer and manure, weeding, grafting and budding, and transplanting.

Women seem to play an important role in selection of high-yielding and high-breeding varieties. They are involved in planning of crop rotation as well as in selecting different crops to be grown side by side.

Plant protection is another activity in which women are involved. This includes use of insecticides and pesticides, as well as physically driving away insects and birds.

Production of compost is another activity in which rural homemakers are involved. They are usually chiefly responsible for preparing the compost pit, filling it with cow dung and green farmyard refuse, and later spreading the compost on the fields.

Women also seem to participate in selection and use of commercial fertilizers. They are responsible for its safe storage and mixing the fertilizer with the soil. Women participate in running bio-gas plants which also produces bio-manure for the field. The gas produced from human and animal waste is utilized as cooking gas or fuel for household purposes.

Harvesting, cleaning, and storage of produce is yet another important activity in which housewives are involved. This includes preservation and storage of seeds as well as of the grains for consumption and marketing.

Though from olden times farm women have been involved in use of low-cost technology, in recent years they are generally in charge of maintenance of modern farm machinery. They clean, oil, and store it for further use.

Management of farm animals also is an age-old duty of farm housewives. They continue to be responsible for collecting and storing fodder, preparing cattle feeds, cleaning of cattle and cattle shed, managing the calves, milking, and selling the milk to milk cooperatives, and keeping the accounts concerning milk sales. Animal nutrition is as much the concern of the farm housewife as is human nutrition.

Farm forestry is now being encouraged by the government to promote an ecological balance in nature and to minimize pollution. Farm forestry (including growth of fruit-bearing trees) has thus become another concern of rural women. They select the plants, acquire them from forest departments, and nurture them to maturity.

References

Chauhan, J. B. Singh. 1983. Agricultural labour in India. Social Change 13: 20-30.

Gopinath, C., and A. H. Kalro. 1985. India: Gujarat medium irrigation project. In Gender roles in development projects, eds. C. Overholt, M. B. Anderson, K. Cloud, and J. E. Austin. West Hartford, CT: Kumarian Press.

Jain, D., N. Singh, and M. Chand. 1979. Women's work: Methodological issues. In Women and development perspectives from South and Southeast Asia, eds. R. Jahan and H. Papanek. Dacca: Bangladesh Institute of Law and Internal Affairs.

Sen, Gita. 1982. Women workers and the green revolution. In Women and development: The sexual division of labor in rural societies, ed. Lourdes Beneria. New York: Praeger.

PART TWO: FOOD, NUTRITION, AND HEALTH

This section focuses specifically on food and its relation to health. Gopaldas provides a general overview of the nutritional status and problems of women. Gujral describes food and dietary practices of rural households. The concluding paper describes how nutrition and health education are provided as part of an integrated program of services for children.

WOMEN'S NEEDS: HEALTH AND NUTRITION
by
Tara Gopaldas

Nutritional Status of Underprivileged Women

There were approximately 320 million females in India in 1984, including approximately 70 million adolescents and teenagers, 28 million pregnant women, and 42 million lactating women. The remaining 180 million were comprised of children up to the age of adolescence, nonpregnant and nonlactating women, and the elderly. All demographic groups of women are neglected in the Third World, but in this chapter, I will focus on problems of adolescent, pregnant, and lactating females of the poor socioeconomic segment.

The profile of the underprivileged adolescent in Gujarat is one of poor physical growth, with about one-third manifesting nutritional stunting, poor dietary and nutrient intake in relation to household chores, and wide prevalence of nutritional disorders, such as iron deficiency anemia, deficiency of vitamin A, and high prevalence of helminth infestation (Gopaldas and Raghaven 1983; Kanani 1984). The pattern is similar to that in other parts of India where goiter is endemic, and in South India where deficiencies of B-complex vitamins are a problem. Girls of the lower socioeconomic class attain sexual maturation at about 13 to 15--much later than their privileged counterparts. An undernourished adolescent soon becomes an undernourished wife and thereafter an undernourished pregnant woman.

The Pregnant Woman

A woman of the lower socioeconomic class is generally married at 15 to 18 years of age. She weighs about 42 kilograms in her nonpregnant state and adds about five to six kilograms in advanced pregnancy. Her height is about 150 centimeters. She is thin, as shown by an arm circumference of about 22 centimeters.

Although her requirement for food energy is 2,500 kilocalories, she gets only about 1,200 to 1,600 kilocalories per day. Since her energy intake is well below requirement, she is deficient in protein (30 to 40 grams per day), minerals, and vitamins (Prema, Madhavapeddi, and Ramalakshmi 1981).

She suffers from mild to moderate anemia, tires easily, and shows signs of giddiness and panting for breath, especially as pregnancy advances. She suffers from clinical signs of nutritional anemia (pale or spoon-shaped nails and paleness of buccal cavity, tongue and conjunctiva), deficiency of vitamin C (bleeding gums), deficiency of vitamin B-complex (cracks at the corners of her mouth), deficiency of vitamin A (difficulty seeing in dusk in late pregnancy), or deficiency of iodine in endemic goiter regions (external enlargement in her throat region). In addition, she is subject to infections from both intestinal parasites (worms or amoeba) or blood parasites (malaria) and very often suffers from infections of the genito-urinary tract due to her poor personal hygiene.

In spite of her extremely poor nutritional and health status, this poor woman silently suffers and continues to work as hard as in her pre-pregnant state. Her food intake does not increase with pregnancy. Shah and Shah (1981) defined a pregnant woman as being at risk if she had a height of less

than 145 centimeters or a weight of less than 42 kilograms at term. A Baroda study showed that more than half of the slum subjects were at risk by that criterion (Gopaldas, John, and Pant 1984). The tragedy is that these at-risk mothers are not only in danger themselves but are predominantly responsible for low-birth-weight babies (less than 2.5 kilograms), who in turn grow to be malnourished, at-risk children.

The Lactating Woman

The underprivileged lactating woman weighs only about 44 kilograms, subsists on a meagre energy intake of 1,200 to 1,600 kilocalories--the same as during her pregnant or nonpregnant state--compared with a requirement of 2,900 kilocalories, and in other respects presents the same profile as during her pregnancy. Yet, the miracle is that she is able to breastfeed her infant successfully up to 24 months. By doing this she sacrifices two kilograms of her already-low body weight (Prema, Ramalakshmi, Madhavapeddi, Samyukta, Neelakumari, Babu, and Panth 1981). The mechanism by which she is able to sustain successful lactation for such a prolonged period on such a poor plane of nutrition is not yet clearly understood.

Some Functional Aspects of Nutritional Deprivation

Functional impairments resulting from iron-deficiency anemia are best known and documented. These include lowered work capacity, impaired cognitive function, lessened resistance to disease, lowered appetite, pica (unusual cravings for food), and low-birth-weight babies. These impairments directly and detrimentally interfere with the woman's daily life pattern. Iron-deficiency anemia is almost universal in this class.

Functional impairment resulting from vitamin A deficiency is mostly linked to vision. Studies of primary school girls and pregnant women show that conjunctival xerosis, with or without bitot spots, are fairly common, but do not seem to be so severe as to cause blindness. Vitamin A deficiency may also be associated with lowered work capacity. Goitrogenic mothers, found in the sub-Himalayan belt, are likely to give birth to cretin babies. Gross and prolonged deficits in food have been linked to severe growth retardation and wasting and also with adverse consequences on mental function.

The Major Factors Contributing to the Low Plane of Nutritional-Health Status in Underprivileged Women

Prolific, Unplanned, and Continuous Child Bearing

The pre-eminent reason for the life of misery endured by Indian women at the low socioeconomic level is poverty, made infinitely worse by prolific, unplanned and continuous child bearing. There is a vicious cycle of: low-birth-weight female infant--malnourished child--malnourished adolescent--malnourished pregnant woman--malnourished lactating woman--giving birth to another low-birth-weight female infant, and so on.

India's crude birth rate still stands at an alarmingly high figure of 33.3. In spite of legislation (i.e., the Child Marriage Restraint Act of 1978, which raised the legal age for marriage of girls to 18), girls, especially in rural areas, are married young. Women, 15 to 29 years, are generally most fecund. Female agricultural cultivators also constitute a highly fertile group (Singh 1984). Despite a strong family planning program,

only 23 percent of eligible couples are protected by contraceptives. The infant mortality rate is 200 per thousand when there is spacing of less than a year between births, but drops to as low as 80 with a three- to four-year interval between births (UNICEF 1984).

Low Self-esteem

Indian women as a whole, deprived ones in particular, have a remarkably poor opinion of themselves. This has been assiduously inculcated in our social mores since the age of Manu.

Inequitable Distribution of Food and Labor at the Household Level

Intrafamilial maldistribution of food among family members, with the male earner getting the lion's share, has been documented (Gopaldas, Saxena, and Gupta 1983). There are also tremendous seasonal variations in the intake of women, meagre as it is, with seasonal variation in agricultural production of food.

In Gambia, for example, the dietary intake of pregnant and lactating women fell drastically when food stocks were low. This coincided with the need for agricultural labor during the rainy months of July, August and September (Paul and Muller 1979). Although parallel Indian studies are not available, the situation among our rural farming communities must be very similar.

The toil of a lower socioeconomic class woman from morning to night is taken for granted. She not only bears and rears the children, cooks, cleans, fetches water and fuel, cares for and milks cattle, but also provides unpaid labor in the fields. Among tribal groups and slum poor, the incidence of women forced to work outside the home for a wage is increasing.

Poor Availability and Utilization of Nutritional and Health Care

In maternal and child health programs, pregnant and lactating women have been found to be poor users of supplementary feeding programs (Gopaldas et al. 1975). The reasons are many--social taboos, disinterest, shyness about eating away from home, unimaginative food supplements, and distances to food distribution centers. Even though the recently established Integrated Child Development Services Program has greatly improved the situation, many women in the target group (mothers) have not been reached.

Our health care system is extremely male-dominated and male-oriented. Even a woman who may never be ill must still undergo six to seven births on the average. Our hospital system and beds are totally inadequate for this level of demand. Also, doctors available at village primary health centers are usually males; hence, most women make little use of the centers for themselves. To this day, most infants are delivered by untrained traditional birth attendants.

Illiteracy and Poor Utilization of Education

The literacy rate in India of females in 1981 was 25 percent, compared with 47 percent of males. Even after a concerted adult literacy drive, only 18 percent of females in the rural areas were literate in 1981, while the corresponding figure for males was 47 percent. It is, however, encouraging that in 1982 about 67 percent of females, six to eleven years, had been enrolled at the primary stage. Unfortunately, except in Kerala and a few other states, only about one-half of these stay on even until Standard V.

Girls of scheduled castes and tribes still usually remain out of school and illiterate. Illiteracy is a great impediment to communication to make this segment aware of its health, nutritional, and other basic needs.

Poor Opportunities to Be Economically Independent

For the most part, females of the lower socioeconomic class serve as bonded labor to the families into which they marry. Even their cash earnings, if any, are controlled by the husband or his family. Such a situation is not likely to benefit the health or nutritional status of the women.

Lack of Comprehension of Legal Rights

Many lower socioeconomic class women are not aware of their basic or legal rights, nor are they aware of the Anti-Dowry Bill (a national law prohibiting dowries). Their poor literacy level, their poor self-esteem, their extraordinary docility in putting up with abuse--emotional, mental and physical--is not conducive to their demanding more from the family food pot, demanding to do less physical labor, or voicing the state of their own health.

Unremitting and Soul-Killing Drudgery of Household Tasks

The toil, drudgery, and monotony of a poor woman's typical day is indescribable. She generally toils fourteen to eighteen hours a day, battling with smoky, primitive stoves, a heavy stone chakki, a blunt sickle, and antiquated devices for drawing and storing water. Such inefficient equipment drains her of her body energy.

References

Gopaldas, T., N. Srinivasan, I. Varadarajan, A. G. Shnigwekar, R. Seth, R. S. Mathur, and V. Bhargave. 1975. Project Poshak. Vol. 1. New Delhi: CARE-India.

Gopaldas, T., K. Saxena, and A. Gupta. 1983. Intra-familial distribution of nutrients in a deep forest-dwelling tribe of Gujarat, India. Ecology of Food and Nutrition 13:69-73.

Gopaldas, T., and R. Raghavan. 1983. Nutritional impact of anti-parasitic drugs, prophylactic vitamin A and iron-folic acid on underprivileged school girls in India. Nutrition Research 3:831-844.

Gopaldas, T., C. John, and I. Pant. 1984. Nutritional status of underprivileged peasant women by trimester in Western India. Department of Foods and Nutrition, M.S. University, Baroda. Typescript.

Kanani, S. 1984. Intervention studies with antiparasitics, vitamin A and iron supplementation on mid-day-meal program beneficiaries. Ph.D. thesis, Department of Foods and Nutrition, M.S. University, Baroda.

1. Chakki is a primitive grinding contraption consisting of one smooth circular stone over the other, with a small orifice in the center to pour grains into. The grains are ground into flour by the abrasion of one moving part over the other.

Paul, A. A., and E. M. Muller. 1979. Seasonal variations in dietary intake in pregnant and lactating rural women in a rural Gambian village. In Maternal Nutrition during Pregnancy and Lactation, eds. H. Aebi and R. Whitehead. Vienna: Hans Huber Publishers.

Prema, K., B. A. Ramalakshmi, R. Madhavapeddi, S. Samyukta, S. Neelakumari, S. Babu, and M. Panth. 1981. Changes in haemoglobin levels during different periods of gestation. Nutrition Reports International 23: 629-636.

Prema, K., R. Madhavapeddi, and B. A. Ramalakshmi. 1981. Changes in anthropometric indices of nutritional status in lactating women. Nutrition Reports International 24:893-892.

Shah, K. P., and P. M. Shah. 1981. The mother's card: A simplified aid for primary health workers in appropriate technology for health. WHO Newsletter 2:51.

Singh, N. 1984. Sterile approaches to female fertility (I & II). Times of India, August 30, 31, 1984.

United Nations Children's Fund. 1984. An analysis of the situation of children in India. New Delhi: UNICEF Regional Office for South Central Asia.

**MEAL PATTERN, NUTRIENT INTAKE, INTRA-FAMILIAL
DISTRIBUTION OF FOODS, FOOD HABITS AND TABOOS**
by
Sundar Gujral

It is difficult to give one meal pattern representing that of rural and tribal families because the food pattern is influenced by food habits and food beliefs, which vary from caste to caste, religion to religion, and, within these, family to family. In addition, the day's menu is influenced by income and other resources, such as ownership of land or milch cattle. A pattern of daily meals common in families residing in rural and tribal areas of Panchmahal and Baroda districts is presented in the case study of Jasi ben.

**A Case Study of a Rural Underprivileged Family
in Panchmahal District**

The housewife, Jasi ben, lives in a family of six members which includes her husband and their four children, aged three to eight years. She and her husband both work on one-half hectare of land on which they grow cereals and vegetables. They also possess two milch cattle. The family's income comes from selling milk and agricultural products.

The family's daily food is comprised of two meals--lunch, a dry meal (without tea), and dinner, which they eat on their return from the field. Before going to the field, Jasi ben makes tea with milk for the entire family, including the children. She puts a little more milk into her youngest child's tea. She does not prepare food to be eaten with the tea, but serves whatever is left over from the previous night's meal.

Jasi ben then cooks a dry lunch to be taken to the field. Whichever cereal she has at home she uses to make rotla (unleavened thick bread). The cereals she may have are wheat, maize or millet. Rotlas are eaten with jaggery (an unrefined sorghum syrup), or chutney (ground onion or garlic mixed with salt and chili powder) and buttermilk bought from the family to whom she sells milk.

The evening meal again includes a cereal--rotla and or rice--and vegetables, whenever they are available, or dal (a lentil soup). She makes no special food for her youngest child. Forest fruits such as mahuda and woodapple and vegetables such as drumsticks and tamarind are eaten by the family whenever they are in season.

Jasi ben uses firewood and dried cowdung cakes as fuel. She and her husband collect wood on their way home from the field, while cowdung cakes are collected, sundried, and stored by her and her older children. Her cooking vessels include various sizes of earthenware and aluminum pots. She uses no measuring devices, but can measure dry rations fairly accurately by scooping them in her hand or a bowl or by taking a pinch with her fingers. To measure liquids, she uses a lota (oval shaped bowl made of aluminum).

There are no marked variations in her day-to-day meal pattern and methods of cooking. It consists of:

Breakfast	Tea with milk and leftover rotla made out of wheat flour, maize flour (<i>Zea mays</i>), jowar flour (<i>Sorghum vulgare</i>) or bajra (<i>Pennisetum typhoideum</i>).
Lunch	Rotla, garlic chutney, buttermilk, and jaggery (unrefined sorghum syrup).
Dinner	Rotla or rice, dal made of red or bengal gram and a vegetable (potatoes or onions). Occasionally ladoos (prepared out of wheat flour, jaggery and ghee) are served.

Nutrient Intake and Intra-Family Distribution of Food

In India, the nutrient intake of the underprivileged in general, and of their womenfolk in particular, is inadequate due partly to the pattern of food distribution within the family and food beliefs and taboos. In many economically disadvantaged population groups, the male head of the family receives the largest share of the family food supply.

The diet of Jasi ben is grossly deficient in energy and essential nutrients such as iron, vitamin A and ascorbic acid. The picture is more alarming in pregnant women, because intake of calories, protein, iron, and vitamin A remains less than the daily recommended allowances. There are no differences in the intake of these nutrients in different trimesters during pregnancy, and thus the gap between intake and recommended allowances widens in the advanced stages of pregnancy. In general, calorie inadequacy is more pronounced than the protein inadequacy. The same picture is observed in young children (one to four years old); however, as they grow older the gap in calories between daily recommended allowances and intake tends to decrease.

A study in Gujarat of the proportionate nutrient intake of specific groups such as toddlers, pre-schoolers, school children, adolescents, pregnant women, lactating women and the aged in relation to the nutrient intake of the head of the family showed the following:

- (1) The young male child is not given preferential treatment over his female counterpart with respect to food intake.
- (2) The toddler (one to three years old) receives about one-third of what his or her father consumes in the way of protein and iron and less than half the food energy and retinol. In comparison with recommended daily allowances, the toddler is deficient in food energy and vitamin A.
- (3) Preschoolers obtain only about 30 percent of the father's intake of calcium and retinol, 40 percent of his protein intake and about half his calories. In contrast to recommended daily allowances, the preschooler is extremely deficient in retinol, calcium and ascorbic acid.
- (4) Children in the age group of seven to twelve years receive about two-thirds of what the head receives in calories, iron and ascorbic acid. The intake of almost all the nutrients except retinol compares well with the recommended allowances.
- (5) Preadolescents and adolescents exhibit a much-improved nutrient profile over that of younger children. They consume about 90 percent of the head-of-household's share of food energy, iron, retinol and ascorbic acid.
- (6) Compared to the head of the household, the pregnant woman's intake of energy, protein, iron and ascorbic acid is moderately lower--alarmingly so with respect to retinol.
- (7) The lactating woman's intake of energy, protein, iron, and retinol is moderately lower than that of her husband. As compared to the recommended allowances, the nutrient intake of pregnant and lactating women is mild to markedly low. Greater deficits are observed in retinol, calcium and iron.

Generally, members of the household do not eat simultaneously. The meal-eating sequence of a typical family of low socioeconomic status is: first, the husband's father, then the husband, then the children, and finally, the mother, who is in attendance throughout and eats whatever remains.

Food Beliefs and Taboos with Respect to the 'Below Sixes', Pregnant and Lactating Women

Food beliefs of various kinds have persisted through the ages. People eat what they have been taught to eat, based on traditions, habits, attitudes and customs. Although food beliefs vary from caste to caste, family to family, and individual to individual, the concept of "hot" and "cold" foods is common to all. "Hot" foods are believed to produce heat when eaten, and "cold" foods are believed to have a cooling effect. Some foods are considered to be gas producers.

"Hot" foods are recommended for the cooler rainy season and "cold" for the hot summer months. Among economically lower classes, foods that are considered "cold" are generally not given to young children, particularly in rainy and winter seasons. These foods are considered to cause dysentery, diarrhea and vomiting. When the child is ill, he is given less food in the belief that food aggravates illness. This causes a greater gap between nutrient requirement and intake during sickness.

Also, in some families, the neonate is not allowed to breast-feed for a period ranging from a couple of hours to as long as two days after birth. The first fluid from the mother's breasts is believed to cause diarrhea, be unsafe for the child, and be undigestible and unclean, and therefore the infant is allowed to breast feed only when actual lactation begins. In addition, there is a belief that the infant's stomach must be cleared before he is allowed to breast feed and homemade laxatives are given. In the absence of breast-feeding, the infant is given a sugar solution or allowed to suck on a piece of jaggery (sugar cane) tied in a piece of cloth.

Pregnancy and lactation is a period of several dietary prohibitions and taboos which severely limit the already deficient diet. Pregnancy is treated as a "hot" condition, and therefore, "hot" foods are eaten less frequently for fear of abortion. Pregnant women are forbidden to eat papaya and dates. In addition, curd dal, maize, jowar, moth beans, ghee (clarified butter), ground-nuts, curd (yogurt), coconut, and milk are considered damaging to the fetus. Foods recommended during pregnancy include jaggery, black pepper, and wheat chappati.

During lactation it is feared that the child could easily contract a cold if the mother eats "cold" foods, and so these are avoided. Also it is believed that if gas-producing foods are eaten by a lactating woman, her infant will suffer from indigestion or gastritis. For the same reason, leafy vegetables are avoided. However, certain other foods such as methi pak, methi ladoo (a sweet preparation containing methi), and green gram dal are preferred during lactation, because they are considered to be galactogogus.

On the other hand, several practices of the tribals of Gujarat are judged to be healthy. These include breast-feeding for as long as possible and permitting the toddler or preschooler to eat nutrient-rich forest fruits.

POST HARVEST CONSERVATION OF FOOD AT THE HOUSEHOLD LEVEL

by
Sundar Gujral

The post harvest conservation of food is an important means of avoiding food losses, making food available for future use, and maintaining quality.

Types of Foods and Containers

It is a common practice to purchase grains in bulk immediately after harvest when prices are low and to store them for periods ranging from a few weeks to a year. Also, vegetables and fruits which are bought, brought from fields, or collected from the forest are stored if not consumed immediately. If a family has milch cattle, the unsold and unconsumed milk is stored until the next meal. Leftover cooked food is stored.

In rural households, types of containers used to store food grains include metal containers (tin, aluminum, or iron), earthenware pots, and gunny (jute) bags. Metal containers are most widely used because they are moisture proof, airtight, and rodent and insect proof. Earthenware pots are not moisture or insect proof. Gunny bags are used when no other container is available. They are less costly containers but are neither rodent- nor insect-proof.

The containers may be circular, square or rectangular; however, circular containers are preferred over rectangular because they have fewer joints, and provide less opportunity for insects to gain entry. Circular containers, however, need more floor space than square or rectangular ones, which can fit into a corner of a room.

The containers have two openings: a wide mouth on the upper side into which to pour the grains, and a small one about two to three inches above the base of the container for taking out the grain. Both openings are kept closed. If the container is not to be opened for some time, both openings are plastered with mud mixed with cow dung.

Preservatives

For nonperishables to be stored in the home for a few months to a year, the most commonly used preservatives are dry neem leaves, ash or fine dry mud, castor oil, boric powder, and mercury tablets.

The dry neem leaves are either thoroughly mixed with the grains or are placed in alternate layers between the grains, with neem leaves as the bottom and top layers. No specific proportion of neem leaves to grain is used.

Ash or clean, dry mud is first sieved through a fine mesh and then mixed with the grain. Millet grain is usually stored using ash as the preservative.

Castor oil is used in the proportion of one kilogram per 100 kilograms of grain. The oil is thoroughly rubbed on the grain so that each grain is covered with a thin film of oil. Rice and pulses are stored with oil application.

Boric powder is generally used in the proportion of 500 grams to 100 kilograms of grain. The powder is mixed thoroughly with the grain, which is then stored in tight-lidded containers.

Mercury tablets, available in the local market or supplied free of charge from the village panchayat office, are used to protect grain from spoilage during long storage periods. About three to four mercury tablets per kilogram of grain are placed in the grain. Sometimes mercury tablets are powdered and mixed with cow dung. Out of this mixture small balls are made, sundried, and used as a preservative for grain.

Storage of Perishable Foods

In a rural household, perishable foods are stored for periods ranging from a few hours to several days. Generally foods such as vegetables and fruits are bought or brought from the fields as needed; however, some perishables are stored in the home by sundrying, pickling, and storing at low temperatures with improvised, homemade refrigerators.

Sundrying: When vegetables such as turnips, carrots, cauliflower, peas, fenugreek leaves, and onions are plentiful, housewives buy these vegetables for future use. The vegetables are cleaned, cut into small pieces, and

sundried. Cut vegetable pieces are strung on thread and hung in the open to dry. Hanging them on strings makes the drying process faster and also protects the vegetables from contact with unclean surroundings. When completely dried, the vegetables are stored in tight-lidded containers. Before cooking, the sundried vegetables are soaked in water for a few hours.

Pickling: This procedure, unlike drying, does not allow the vegetable to be cooked later by a variety of methods. The pickled vegetable is eaten with chappati or rotlas (unleavened bread).

Improvised refrigeration: Refrigeration means storage of food at a temperature at which bacteria cannot grow, keeping it almost fresh. To make an improvised refrigerator, a layer of sand about three to four inches thick is laid on the floor in a cool, airy corner of the room, or the sand is placed in a metal container in a cool corner. The sand is wetted and a wide earthenware bowl is placed in it. Food items are placed in the bowl, a bamboo or cane basket is inverted over it and the basket is covered with a wet piece of cloth or jute. The corners of the cloth are allowed to touch the wet sand in order to keep the cloth wet, and the sand is occasionally sprinkled with water. Leftover cooked food, milk, yogurt, vegetables, and fruits stored in such a refrigerator remain fresh for a day or so.

**NUTRITION AND HEALTH EDUCATION IN THE
INTEGRATED CHILD DEVELOPMENT SERVICES SCHEME
FOR TRIBAL AND URBAN HOUSEHOLDS**
by
Subadra Seshadri and Farhat Saiyed

Needs for Services: Case Studies of Families

Ramtu Pamsingh lives in the village of Dhanpari, in Chhotauddepur, 105 kilometers away from the city of Baroda. She lives in a joint family, together with her husband and their three children, two daughters and a son. In the last trimester of her recent pregnancy she weighed 45.5 kilograms. Ramtu works on the family farm, about two kilometers away. She leaves by 7:00 A.M., returns home for the noon meal, and goes back to work.

Ramtu usually has three meals in a day. The morning meal consists of rab, a thick porridge coarsely ground maize boiled in water with a little buttermilk and salt. Ramtu usually eats a big bowl of rab. Her noon meal consists of maize rotlas and liquid dal made from split redgram. Available green leaves, such as tamarind or okra, may be added to the dal. The evening meal is rab, maize rotlas, and a curry of whole pulses or vegetables.

Rarely do women in the village increase their food intake during pregnancy. It is a strong belief that pregnant women must eat less, not more.

Ramtu was still working on the farm during the last trimester of her pregnancy. A few days later she delivered a boy.

Ramtu had her delivery in the nearby health center, but many others in the village give birth to their babies at home. Ramtu started breast-feeding

her baby four to six hours after birth, as most women in the village do. She went back to work on the farm one week later.

Most mothers in the village give only breast milk to the babies until about the age of eight months. The first solid food they give is rab. The child is then fed the same diet that of adult members. Often young children are unable to get enough calories from this bulky traditional diet. Many of them are undernourished.

Naresh Raghla, the youngest son of Jakli, who lives in the same village, is a year and a half old and weighs nine kilograms. His body weight is only 70 to 80 percent of that of healthy American children of his age. Jakli, like Ramtu, lives in a joint family with her husband's brother's family and mother-in-law--ten members in all. Besides Naresh, Jakli has another son, three years. Her sister-in-law has three children, all boys, aged nine, three, and a year and a half. When Jakli and her sister-in-law are away working on the farm, the children are cared for by the grandmother.

All the young children in the family are fed the adult diet. Naresh, for instance, is given rab, maize rotla, and dal, the usual foods cooked at home. In addition, Jakli breastfeeds him. Naresh gets about 600 kilocalories daily, which is only 60 percent of the Recommended Dietary Allowance (RDA).

Ramtu and Jakli, like all women in the village, have no formal education and are unable to read and write. They lead lives not very different from the lives of their mothers, but in some respects life has changed in the villages. A generation ago, the women did not have easy access to primary health care services. Immunization facilities were not easily available and babies were delivered by untrained traditional birth attendants, who were not careful to use sterilized equipment for cutting the cord after birth. Mud or cowdung was frequently used to dress the cord. Infant mortality due to neonatal tetanus was high. Rarely did women have antenatal or postnatal check ups. The scene has changed now, with the introduction of early childhood and maternal services.

Conditions in urban slums are a little different in detail, but the nutrition and health problems of pregnant and nursing mothers and of children under six are not very different from those of rural mothers and children.

Lalita Ambalal is a pregnant mother who lives in Kishanwadi in the city of Baroda. She has studied up to the fifth standard and can read and write Gujarati. She has a three-year-old daughter and is expecting her second child. A full-time housewife, she spends most of her time in household chores. Lalita eats only two meals a day.

At 6:00 A.M., she has a cup of tea, begins her housework, cleaning the house, getting her daughter ready for preschool, and cooking. By 10:00 A.M., when her husband has left for work, she eats a lunch consisting of wheat rotlas and dal or whole pulse and some vegetables. After this she rests awhile and completes other household chores, such as cleaning the food grains and taking them to be ground in a nearby flour mill.

At noon she begins fetching water from a nearby corporation tap, where water is available three times a day, an hour each morning, noon, and evening.

Lalita prefers to obtain her day's supply during the afternoon. About 2:00 P.M., she has another cup of tea. Her evening meal consists of a plate of khichdee (rice and redgram dal cooked together) and kadhi (a beverage of buttermilk). Lalita believes that women must eat less during pregnancy.

Preschool children in urban areas have a slightly different meal pattern than their tribal counterparts, but their caloric intake also falls much below the RDA. Three-year-old Harisingh Devji Jadeja is the youngest of four children in another Kishanwadi family. He drinks a cup of tea in the morning and eats a small piece of jowar rotla. About 10:00 A.M. the child has another quarter of a jowar rotla with a vegetable, usually brinjal (eggplant) or potato. Then he goes to the preschool at the anganwadi (social services center), where he is given supplementary food. When he returns home about 3:00 P.M., Harisingh is given another half cup of tea, and by 7:00 P.M. he has had his evening meal of khichdee and kadhi. His total caloric intake is about 750 kilocalories per day, 62 percent of the RDA.

The children and women in urban slums are also covered by the ICDS scheme, described below.

The ICDS Scheme

The Integrated Child Development Services (ICDS) scheme was started in 1975 in thirty-three experimental blocks. Dhanpari was one of the first villages to have this program in Chhotaudepur. In urban Baroda, the scheme was started in 1981. By the end of 1985 it is expected that the ICDS scheme will be extended to one thousand blocks all over India, and by 1990 to two thousand. With two thousand projects in operation, about one-fifth of the target population of women and children will be covered.

The ICDS scheme delivers a package of services to pregnant and nursing mothers and preschool children, among whom undernutrition and malnutrition are widely prevalent. The services are delivered through centers called anganwadis, serving a population of seven hundred to one thousand. The anganwadi worker, a woman, is paid an honorarium of 250 rupees per month, and is helped by another woman, who is paid 90 rupees per month. Often the anganwadi is located in the helper's house.

The goals of the ICDS scheme are to improve the nutritional and health status of preschool children, reduce their mortality, morbidity and malnutrition, lay the foundation for physical, psychological, and social development, and enhance the capability of the mother to look after the nutrition and health needs of the child.

Supplementary nutrition, consisting of a snack or cooked dish, is provided to preschoolers, pregnant women, and nursing mothers. Immunization shots are also given. Women are given antenatal and postnatal checkups and children under six are given periodic health checkups. Both the women and the children receive supplements of iron and folic acid, and the children also receive massive doses of vitamin A. These are prophylactic measures against anemia and nutritional blindness.

Although the anganwadi worker is expected to educate the mothers regarding nutrition and health care, there is very little of this in practice. The anganwadi worker herself has had little training and has few visual aids or other media support to carry out the education.

A baseline study of nutritional status in the Baroda area identified anemia as a major problem in pregnant women and nursing mothers, and protein-energy malnutrition, anemia, and vitamin A deficiency as the major nutritional problems of children. More than 50 percent of the mothers were unaware of the ICDS services other than supplementary food and immunization nor of how they could participate in anganwadi activities. Anganwadi workers confirmed that community participation was minimal or nonexistent.

None of the tribal mothers had seen the growth card maintained by the anganwadi. Of the urban mothers, 63 percent had seen it but were not aware that it is a useful tool in identifying early malnutrition. Food intake during pregnancy and during infancy and early childhood was largely determined by traditional practices rather than actual needs. Late introduction of solid foods (when the child was eight to twelve months old) and inadequate feeding of infants and toddlers contributed to malnutrition. Few mothers understood the causes of the major nutrition and health problems, nutritional anemia, vitamin A deficiency, and worm infestation, or how they could be prevented. In contrast, the importance of immunizations was appreciated by 50 percent of the mothers.

A few mothers were aware of the use of oral rehydration solution in the treatment of diarrhea, but none had actually given it to their children. Folk remedies for diarrhea, consisting of a paste made of powdered poppy seeds or nutmeg with water, were popular among both tribal and urban mothers. A small quantity of the paste is fed to the child with a spoon three or four times a day. Some mothers also gave powdered cumin seeds mixed with curds (yogurt). Both preparations are believed to be effective; however, they do not replace the lost water and salts in severe diarrhea.

Constraints on Educational Programs

Both time and physical fatigue limit participation in educational programs. Most tribal women and many village women work on the farm and therefore for much of the year are not available during the day. Every day they must sweep and mop the floor, grind maize in the stone grinder to make rab and rotlas, fetch water from a nearby well or riverbed, cook, and take care of their children. By the time they finish all this and the farm work, they have little time or energy to participate in an educational program.

The situation is different when the harvesting is done and the land is lying fallow in anticipation of the next rains, usually mid-March through June. Community outreach during this period is more effective because the women are relatively free.

The urban women have similar problems. In addition to their own work, many also work as housemaids in three or four other households. Water, available only during limited periods of time in a day, must be fetched for household use. Another constraint is lack of economic incentives. The women

tend to view a program as useful to them only if there are tangible benefits-- a monetary incentive or skills to generate income.

To be successful, educational programs must be offered at times when sizable numbers of women are free and must be linked to immediate visible benefits.

PART THREE: WATER SUPPLY, SANITATION, AND FUEL

Water, sanitation, and fuel are discussed in terms of the present situation, implications for household well-being, and societal concerns related to social and economic development. In the concluding sections, Hart and Dave describe the situation in Rustumpura and a tribal village, respectively.

WATER
by
Kalpana R. Paralikar

Sources of Water

Rain is a main source of water in Gujarat. Rain water is collected in natural and manmade lakes during the monsoon season and then passed through canals to the fields for irrigation. For drinking purposes it is passed through water-purifying plants into overhead or underground tanks especially prepared as water reservoirs. From there it is supplied to public water sources and directly to some households. It is available at regular intervals during the day at the public sources.

Rivers are another source of water for irrigation and household consumption. The flowing river water is considered pure and is used directly by the majority of households in rural and semi-urban areas. However, rivers are becoming polluted by industrial effluents and urban sewage; therefore, there is a need to educate people about hazards to their health from pollutants. Measures are being taken by national and international agencies in India to treat the pollutants before they are ejected into the river. The rivers of Gujarat, though often flooded with monsoon rains, become dry riverbeds in the latter part of summer. Dams have been constructed to provide for irrigation, but provision of water for domestic purposes during the dry season is not so widely made.

The other main source of water for domestic purposes is underground spring water collected in wells. In olden times, the provision of a well for every habitat (village) was established under the rule of the Maharajas. Some of these wells of Gujarat have archaeological importance because they were beautifully decorated with sculptures and paintings. Such a well had steps leading to the bottom and banks which provided places to rest, socialize, clean utensils and clothes, and bathe. However, with increasing population and changing habits regarding water use for cleaning utensils, laundering clothes, and bathing self and animals, the wells were not sufficient. Acute shortages of water for irrigation and household use were experienced.

Village ponds came to be used as an alternative for cleaning utensils, laundry, bathing, care of animals, and, in some cases, even for drinking. In addition, tube wells dug deep into the inner springs helped. Electric and dry-battery-cell pumps and, in some cases, handpumps are used.

However, many villages in India today fall within the "no source of water" belt. In such villages water is either brought in tankers, if the local government can afford it, or the women walk long distances to fetch it. Attempts are being made by national and international agencies to bring water to such villages through pipe lines. Limitations in promotion of these schemes are that the cost is not likely to be recovered from villagers, since the majority live below the poverty line (i.e., have incomes less than U.S. \$70 per capita per annum), and there is general apathy toward problems of women, the only persons involved in fetching water long distances. Water is not a problem for big landholders, because they have money to make their own connections or hire paid help to carry it.

A study by Pathak and Rana (1982) indicated that the daily requirement of water per family for drinking and cooking is about 11 to 15 ghadas (a large water container holding about 20 liters) per day, and in some cases more. Other use of water, such as cleaning utensils, laundering, and bathing of persons and animals, is usually carried out at the source, or at the nearest pond filled with water during the monsoon.

Most of the water used for domestic purposes in rural areas is from rivers, canals, lakes, and wells. It is not subjected to any purification process. People in rural areas believe that river and spring water undergoes natural purification as it passes through porous stones and sand. The villagers' concept is limited to visible impurities and does not include micro-organisms, gases or other physical properties. Visible impurities are removed by straining water through a piece of cloth while filling the pot used for drinking purposes.

Laboratory tests were conducted by Pathak and Rana (1982) on samples of water from a pond, a tube well, and public water taps. These water samples were subjected to three purification procedures: ordinary straining through cloth, filtering through a three-pot filter, and the so-called indigenous water filter (IWF) which consists of two pots with a strainer fitted in the middle. The samples were subjected to physical examination to check color, odor, and taste, biological examination to detect the presence of micro-organisms, and bacteriological tests to detect the presence of harmful bacteria. The examinations revealed the following:

1. Physical examination under laboratory testing revealed that the water samples were partially clean, colorless and showed the presence of granular particles when filtered through a three-pot filter. The samples appeared to be completely clean except for the pond water. All were colorless after being filtered through the IWF.
2. Biological tests revealed that there were micro-organisms, algae and fungi present in the sample of pond water after it was filtered through a three-pot water filter. Samples taken from taps and tube wells were completely free of micro-organisms. Pond water also showed the presence of protozoa.
3. Bacteriological tests revealed a low viable count in all water samples that were filtered through the three-pot water filter, but the samples taken from tap and tube wells had a lower viable count than the sample from pond water. Except for pond water, samples filtered through the IWF showed very few bacteria and were found not harmful for human consumption.

Storage and Household Purification

Drinking water and water for cooking is generally stored in earthen pots made by local potters. These pots are stacked one over the other in a place called the paniyara, a high platform with sockets to hold the round-bottomed pots. Paniyara are generally built of mud or concrete between the kitchen and living area as space dividers. Attached to the paniyara is a washing space, where utensils are washed and stacked. Water pots made in winter are generally used for storing drinking water because the villagers believe they cool the water faster. Water for cleaning, washing and bathing is stored in buckets made of tin, steel, or plastic.

Water for drinking is generally strained through a clean cloth which is washed after every use. Water may also be subjected to boiling and treatment with alum during the monsoon and during epidemics of cholera, dysentery, and diarrhea. Boiling kills bacteria and inactivates micro-organisms, while alum helps to settle the impurities at the bottom of the pot. After treatment, the water is strained and cooled. Tanks, wells, and ponds are chlorinated from time to time to purify the water.

Drinking water is taken from the pot with a doya (a tumbler with a long handle), then poured into a glass for drinking. Water used for cooking is stored in brass and copper containers. These are given to the bride at the time of marriage by her parents and close relatives.

Sanitation

Sanitation is the biggest problem faced by public health officers. Its main aspects are the water supply, the drainage system, elimination of human and animal excreta, cattle shed arrangements, and general cleanliness. The kinds of sanitary facilities promoted by public health departments include low-cost latrines (dry or water seal), soak pits for waste water disposal attached to bath places and kitchens, compost pits to utilize household and farm waste in preparing green manure, and bio-gas plants to utilize human and animal waste as alternate energy sources and manure.

Programs of Sanitation

Several kinds of latrines are promoted. For domestic use, there is the bavla type of dry latrine, consisting of a deep pit concreted at sides and top near the seat where the sanitary bowl is attached. At the bottom is a structure like an inverted U-funnel, which is prepared with bricks and concrete. Little water is used in these types of latrines, being required only to flush the excreta and to clean the user. This type of latrine, mainly for family use, is government subsidized.

Trench latrines are built on the outskirts of villages for community use, with separate units constructed from tin or gunny cloth. The soil is covered daily with earth until the trench is full, when the contents are used as manure on the farms.

Recently, in villages where there is a water source, water-seal latrines have been promoted for family or community use.

Sanitary and sewage facilities are affected by water facilities. If each house were connected to the main water supply, a general sewage tank could be built for collecting solid and liquid waste, but since most rural households still face problems in acquisition of water, its disposal is also a problem.

Soak pits are the most common means built in the villages for water disposal. A pit is dug near the bath place from which the waste water flows. It is filled with layers of porous substances, such as soft coal, bricks, and sand, and covered with a gunny bag and a small dish for collecting the solid waste, such as vegetable peelings. Soak pits function well during dry seasons but tend to overflow during monsoon. The usual practice of rural households is to take baths on the front side of the house. In such cases, the soak pits

are prone to being run over by bullock cart or tractor. Those located in the backyard remain usable longer.

The compost pit is generally dug at the end of a lane or edge of a village. Cowdung, solid waste from households, and ash is stored in the pit in layers, covered with earth, and left for one monsoon. Afterwards the contents are dug out and used as manure. If it is a collective compost pit, the manure is divided among the contributors. If it is a village-wide compost pit, the produce is available for a fee which is deposited for public use through the panchayats.

Bio-gas or gobar gas plants are another way of sewage disposal. These give two benefits. They utilize human and animal waste (excreta) to produce bio-gas for use in cooking and illumination, and the leftover, semi-liquid by-product is used as manure in the fields.

References

Government of Gujarat. 1985. District Annual Report, 1983-84. Baroda: Government Printing Press.

Indian Express. 1985. Sunday Edition, 28 July, 7.

Pathak, M., and A. Rana. 1982. Developing indigenous water filter. Report on action project carried out by the Department of Home Science Extension and Education, M.S. University, Baroda. Typescript.

FUEL by Rachel George

Rural households, by and large, depend on two or (rarely) three different energy forms for domestic purposes. Almost 100 percent of the village households in Gujarat use wood-burning stoves (chulahs) for cooking. In addition to cooking, they warm the house and keep away insects. The fuels used include firewood, dung cakes, and agricultural wastes. A very few households use kerosene for cooking, primarily for warming milk and making tea. A few households use coal, sawdust, or liquid petroleum gas. Electricity is consumed by a smaller proportion of economically better-off households for home lighting. Most rural households depend on kerosene lamps and lanterns for home lighting. The petromax (a kerosene pressure lantern) is used for illumination during festive occasions and marriages.

Per capita demand for wood fuel averages about 0.75 tons per year. The equivalent of about 200 to 300 days per year is spent by typical rural families for gathering firewood (Sethuram 1983), mainly by women and children. Farm households procure wood and agriculture wastes chiefly from their own fields. Landless laborers and harijans gather their fuel from fields, waysides and nearby forests (George 1984; Sethuram 1983; Sharan 1984). The

mean number of persons engaged in this per household is 2.45; the average time spent per day is about three hours (George 1984).

Almost all women in villages cook on traditional wood-burning chulahs (Gomkale and Shah 1981; George 1984). Open fires, built within three stones, are used by homeless households and by others on such occasions as a feast for a large gathering. A U-shaped, single-pot chulah is used in almost all households. Many households have two stove units, one inside the kitchen and the other on the back veranda. Multiple-hole chulahs are not commonly used by households. If two-hole chulahs are used, one hole is used for burning firewood, agricultural waste, or dung cakes, while the other is provided with a grate for burning charcoal to warm milk or vegetables. The chulahs are made by women, with materials such as mud, cowdung, ash, fine sand, dust, and hay. The skill with which the women make these is quite surprising. Popular cooking methods in the villages in Gujarat are boiling, steaming, roasting, and, occasionally, frying.

Shielded, U-shaped chulahs are not satisfactory from a safety and convenience aspect. Frequent blowing of air into the firebox is necessary to keep the fire burning, and wood often burns outside the firebox. The cooking vessels gather soot, which is hard to clean.

Men are not concerned much about the lot of their womenfolk and feel that there is nothing lacking. Some women do perceive that smoke and heat from their chulahs cause health hazards and inconveniences (Gomkale and Shah 1981). The common cold, headache, burning or watery eyes, loss of eyesight, and development of cataracts are some of the symptoms mentioned. However, many other women accept their chulahs without associating negative attributes to them (George 1984). The prevalent shielded, U-shaped chulahs have been part of their homes for many decades. Lack of awareness and apathy are typical of rural women.

The National Fuel Wood Committee of 1982 reported that, against the present requirement of about 133 million tons of fuel wood per annum, the recorded total annual production from forest and private lands was only 49 million tons. Because supplies of energy are dwindling and time is needed to develop new, renewable sources, the fuel problem is assuming alarming proportions. India is facing an energy crisis--depleting bio-mass and escalating prices of liquid fuels. Depletion of bio-mass has far-reaching impacts on rural households. In view of this, the country has adopted energy conservation as a national goal.

Many programs have been undertaken by the central and state governments to educate the population regarding the energy situation and to popularize improved, smokeless chulahs and renewable energy technologies such as solar cookers. It is proposed to make all the villages of Gujarat smokeless through construction of the improved, more-efficient, smokeless chulahs. The program is being sponsored by the Gujarat Energy Development Agency which serves as a liaison between the central government and local units. The Home Management Department of the Faculty of Home Science, M. S. University of Baroda, has also conducted a project on the construction of improved chulahs in Jaspur, one of the villages of Baroda District, and succeeded in making 134 houses smokeless (George 1985).

References

George, R. 1984. Dietary habits and fuel consumption of households in Jaspur Village: Data collected as a part of the project on fuel efficiency of wood burning chulahs, sponsored by Gujarat Energy Development Agency. Faculty of Home Science, M. S. University of Baroda. Typescript.

George, R. 1985. Construction of improved chulahs in Jaspur Village, 1984-85. Report of project sponsored by GEDA, Gujarat. Home Management Department, Faculty of Home Science, M. S. University of Baroda. Typescript.

Gomkale, S. D., and J. M. Shah. 1981. Cooking with chulahs - A survey in Bhavnagar area. Bombay: Tata Energy Research Institute.

Government of India. Ministry of Energy. Department of Non-Conventional Energy Sources. 1983. The National Project on Demonstration of Improved Chulahs.

Jyoti Consultant Limited. 1984. Report on energy consumption patterns in rural areas of Central and South Gujarat. Vadodara, India: Jyoti Consultant Limited.

Mehta, R. S. 1983. Report of the rural energy studies in the districts of Saurashtra and Kutch. Department of Economics, Bhavnagar University. Typescript.

Sethuran, S. 1983. Energy and rural development. ASSET 5:17.

Sharan, G. 1984. Cooking fuels in rural North Gujarat. Energy Management 3: 209.

WATER, SANITATION, AND FUEL IN RUSTUMPURA - A CASE STUDY
by
Sharon Y. Hart

The health conditions of a village depend upon such factors as mode of life, nutrition, quality of drinking water, and standard of hygiene. Practices or habits exert tremendous influence upon the health of a person.

Water

Drinking water is not always available in sufficient amounts in India, and in many rural areas it is unsafe to drink. Water is a health hazard during the rainy season, primarily due to uncovered wells which become contaminated with excreta, worms, fermenting leaves, and suspended matter. Contaminated water is considered the main cause of water-borne diseases such as diarrhea, dysentery, cholera, and typhoid.

In Rustumpura, all four wells have platforms, but remain uncovered. Villagers bathe and wash clothes near three of these, and pools of stagnant water form, which leads to breeding of flies and deposition of fungus. Only one home in the village has its own well with a hand pump on a cemented platform. The few drains in the village are mostly unpaved.

The local government in Rustumpura has made some improvements in sanitation. All the wells in the village are serviced twice a month by a local inspector, who disinfects the water with a chlorine powder. If an epidemic erupts in Rustumpura, the wells are disinfected daily, villagers are asked to boil all drinking water, and halogen chlorine tablets are given to families free of charge to disinfect their drinking water.

At other times, little is done by the family to purify water. The concept of safe water, expressed by those interviewed, was colorless water without suspended matter. There appeared to be little difference in the type of water used for drinking, cooking, and washing purposes. Matkas (clay pots) are the most common containers used for storing water. Only a small number of households drain off the waste water from the dwelling. Others dispose of waste water in the kitchen garden or wherever used.

Safe water and condition of the well and its environs emerge as the two main considerations of an ideal well. Most women in Rustumpura are satisfied about the availability of water. The needs expressed were for covered wells, water for animals, and access to water taps at various locations in the village. Of course, most families agreed they would prefer to have their own water pump or water tap inside or close to their home.

Water needs to be available in every household. At the present time in Rustumpura, it is the woman who spends approximately two hours per day carrying water for cooking, drinking, bathing, and washing utensils and clothes. Women bear heavy brass and earthen pots of water atop their heads. Girls learn this task at a very early age. Only women in strict seclusion, wealthy Muslims, and young bahus of high-status Hindu families do not visit the well but depend upon their menfolk or male servants to fetch water.

Water is also used to do the family laundry, and it is the woman's responsibility to perform this household task also. After bathing, adults usually wash and rinse out their own clothing, and mothers wash their small children's clothing. Heavily soiled clothing is either beaten with a large wooden bat or scrubbed on a flat stone with a brush in hot, soapy water.

Daily bathing, sometimes two or three times a day, is important. A village woman will wear a sari and squat behind a specifically built hedge of twigs in her backyard. Her sari remains on as she pours water over her head and body, rubbing soap through the wet cloth. The wet sari is removed and a dry one put on without exposing the body. Men and children bathe in the open in backyards, at one of the wells, or the pond.

Sanitation

Living conditions in Rustumpura are like those in most other villages. Families live in houses surrounded by dung, flies, mosquitoes, mud, and

stagnant water pools. It is common to keep the cows, goats, hens, and other animals in the same house in which the villagers themselves live. The excreta of cattle and hens compounds the sanitation problems.

During the dry season streets are full of dust and animal excreta. During the monsoons they become muddy as well. Rustumpura has no drainage system, and the waste water accumulates in streets and surrounding areas.

The government has begun steps to improve sanitation conditions in the villages. First, many of the low-class homes have been issued government latrines, which has helped. Yet, early each morning one can see men and women with their small pots of water enroute to fields or roadsides to eliminate.

Secondly, since most homes lack ventilation, the government has provided ventilators to low-income families. These are installed in a wall near the cooking area which helps to rid the house of smoke.

Street cleaners have been hired by the local government to clean village roads. Unfortunately, in Rustumpura the street cleaner only maintains the main road. All other roads still pose a health problem to the villagers.

Fuel

Only the wealthier villagers in Rustumpura cook with kerosene. All of the homes use mud chulahs for cooking food. These spread smoke on walls and cooking vessels, affecting the eyes and health of the cook. Various models of the smokeless chulah have been developed to solve the problem and are provided by the government to homes with an annual income of less than 3500 rupees (approximately 350 U.S. dollars).

Cowdung is one of the main fuels used in the chulahs. Every day a village woman will sweep her house and courtyard to keep the earthen floors clean, and she cleans the cowshed of dung. She then shapes this dung into round patties and lays them in the sun to dry. Once dry, the patties are added to a neat pile and used as fuel. Firewood is also piled up, generally gathered by the women and female children.

SANITATION AND WATER SUPPLY: A TRIBAL CASE STUDY

by
Parul Dave¹

In spite of the various tribal development programs launched by the government, many of the tribal groups (tribals) of Gujarat continue to exist in very poor conditions. This is true of the Bhils of Panchmahals. Besides other economic hardships, inhabitants of this hilly region face problems of inadequate water supply, unhygienic living conditions and fuel scarcity. No efforts to safeguard health and adequate nutrition can succeed without

1. The author wishes to acknowledge the contributions of Hakim Mushira and Tavkar Nivedita.

catering to fundamental needs or provision of safe water, cleanliness, proper disposal of waste, and accessibility of cooking fuel.

Water Supply

There is an acute problem of water which takes a particularly ugly shape from April to June (the last months of the dry season), when nearly all the wells run dry. The tribals are forced to drink the muddy water of the wells or dirty stagnant water of puddles or pools in the forest.

Sampoi, one of the villages of Panchmahals, occupies an area of approximately 586 hectares, of which approximately 70 are irrigated. Sampoi has two government wells (one dry), and several kaccha (less well-constructed) wells, but no pump wells. It takes a long time for the women to fetch water and requires more than three trips. Washing clothes and bathing are usually done near the wells.

The persons responsible for the purification of water are the community health worker and the multipurpose health worker. The government wells are chlorinated twice a month in summer and once a month in winter, and during the monsoon season. If purification were desired for a private well, an application would have to go through the sarpanch and talati of the village. Due to the high percentage of illiteracy and the botheration of formalities, private wells are never purified.

Water samples from wells near the balwadi, school and dispensary of each of three villages--Moti bandibar, Dhandhela, and Dudhiyadhara--were recently analyzed at the Vaccine Institute of Baroda. Every water sample was found to have more than 1,800 coeliform bacteria, a concentration high enough to cause intestinal infections.

One can imagine the plight of the young children who consumed such unhygienic water, which was located near their school and health facilities.

Personal and Environmental Sanitation

Bhil children look unkempt and dusty because they play with mud. Nasal discharge is a common sight. In many instances, the family shares its sleeping quarters with the cattle. Garbage is disposed of in front of the house or in the fields. Flies are constantly present in the child's surroundings.

Most Bhil mothers bathe their children daily, pouring water over the child's body and scrubbing with their hands. Children are made to stand in the sun to dry themselves, then wear the same dirty clothes.

Once the children have acquired bladder control, they use one corner in the house for urinating. Because the floor is smeared with cow-dung, it absorbs the urine quickly, but pollution in the air cannot be escaped. Children defecate in front of the house, in the fields, or in the streets.

If a child defecates within or in front of the house, the mother or grandmother picks up the feces with a spade and throws it into a nearby field, then spreads mud on the place. The soiled clothes of the infants are removed when the mother is free from whatever task she has been performing and are hung on a rope nearby. The mothers use water from pots to clean the infants and younger children. No cleansing agent, such as ash or mud, is used to wash the hands after cleaning the child.

Food-related sanitation is similarly poor. While breast-feeding, the child's mouth may be covered with dirt, the mother's blouse unwashed, and flies surround the area. Older children do not wash their hands before eating.

The following specific observations are indicative of the neglect of basic hygienic habits among the tribals:

- * A mother was sweeping the floor where the children were sitting and eating their meal.
- * A dog was eating from a child's plate and the mother shouted at the child to drive the dog away. The child did so and continued eating.
- * Children picked up and ate food from the floor.
- * The mother picked up a stick and used it as a spoon to stir food.

However, brass vessels used for cooking and serving may be spic and span. They are cleaned with ashes of wood and left in the sun to dry.

In justice to the Bhils, one should remember that (1) water is a luxury because it is very scarce in this area; (2) dogs protect the household from thieves and dacoits (brigands) and, therefore, are highly valued; and (3) the meaning and value of cleanliness is perceived differently by the tribal society than by urban society.

Fuel

The main source of fuel for the Bhils is wood. They rarely use kerosene. In the hilly region of Panchamals, going in search of wood is a time-consuming job which involves venturing forth to ever greater distances as wood becomes more scarce.

PART FOUR: HUMAN RESOURCE DEVELOPMENT

This section is concerned with how human resources are developed. Paralikar and Yates provide an overview of the educational system, with special attention to the education of girls. This overview is followed by a case study describing the schools of one village. Other papers describe an extension program for women and a project to improve educational programs for tribal women in Gujarat. The concluding papers are concerned with socialization in the household setting. Bhavnagri presents case studies describing the socialization of infants, Dutta and Saraswathi describe one family's day, and Dave describes child-rearing practices of tribal families.

EDUCATION AS A HOUSEHOLD RESOURCE

by

Kalpana R. Paralikar and Barbara A. Yates

Formal Educational System¹

Education is a way to preserve culture and transmit it to future generations. It is also considered essential to social change. Formal education in India can be divided into stages--preschool, primary, secondary, and higher secondary school levels, and the college and university level.

Preschool and Primary Education

Preschool education begins at about two years of age. In urban areas it is in the hands of private agencies, but in rural areas preschools are conducted under various developmental and welfare schemes. Besides socialization, preschools prepare the child for formal education.

Primary education is offered in elementary and middle schools. Elementary school consists of classes from first through fourth standard and most are coeducational. They prepare students to read, write, and calculate, and also introduce them to environmental sciences and social studies.

Middle school consists of classes from fifth through seventh standard. A more comprehensive curriculum is offered, including two or three languages--the mother tongue, the national language (Hindi), and a universal language (English). It also includes courses such as drawing, music, tailoring and embroidery, besides the sciences and mathematics. Schools at this level are coeducational, but boys and girls are frequently taught separately.

Secondary Education

Lower secondary education begins at the eighth standard and terminates at the tenth standard. There are both coeducational schools and separate schools for girls. At this level the students are offered either a science-based curriculum or a general curriculum. Those wishing to pursue professional courses choose bio-sciences and mathematics; others choose arithmetic and nonscience courses. This is the end of formal education for many, who turn to the short term certificate and diploma courses after passing the secondary school certificate examination.

For girls there are post-secondary-school certificate courses in home science, tailoring, embroidery, and the like. Besides, there are women's polytechnics designed to prepare them for jobs or to help them establish themselves in independent businesses. The technical education board also offers courses to teach secretarial and other business skills such as PBE (Private Branch Exchange) operation, telephone communications, receptionist service, shorthand, and typing. Nursing and midwifery are popular professional courses. Preprimary and primary teacher's training is also popular.

1. by Kalpana R. Paralikar

The last stage, for those who wish to pursue higher education, is the higher secondary level, of the eleventh and twelfth standards. In Gujarat, girls are offered home science under a vocational curriculum, besides the commerce and science curriculum. Girls may enter professional college-level curricula in medicine, dentistry, physiotherapy, microbiology, biochemistry, and nutrition. The engineering curricula include architecture; civil, mechanical and electrical engineering; electronics; and pharmacy. Requirements at this level include two languages and courses in science (mathematics, biology, physics, and chemistry) or commerce (statistics, economics, business administration, accountancy, and commercial mathematics). Students in Standards XI and XII thus select one of three curricula--home science, science, or commerce.

Higher Education

At the university level women generally take courses leading to the teaching profession, research, or office duties, although more and more women are selecting areas that were earlier considered to be male-dominated, such as engineering, medicine, and para-medical studies.

Constraints to Girls' Education²

Two attitudes toward the education of women have coexisted side by side in India since the 19th century. On one hand the traditional view has been that education for girls should stress preparation for their future roles as wives and mothers. This view prevailed during the British colonial period (prior to 1947). The second view, reflected in the Constitution of the Republic of India, accepted in theory the equality of women and their ability to play multiple roles in society. As the Committee on the Status of Women pointed out in their report in 1974, an understanding of this ambivalence between the traditional (and persisting) and modern attitudes toward women's education is essential for examining the progress of girls' education and social obstacles to participation of girls in schooling.

There are wide differences between males and females in reported literacy and in participation in formal schooling. In 1947 the number of girls enrolled per 100 boys was 36 at the primary level, 22 in the middle schools, 14 in secondary schools and seven in vocational schools. In 1980-81, there were 67 percent of Indian girls, age 6 to 11, in school as against a reported 100 percent of boys; and 29 percent of girls, age 11 to 14, compared with 53.5 percent of boys. Dropout rates within primary school are higher for girls than for boys. Out of 100 girls who begin Standard I, only about 30 reach Standard V. Only about 13 percent of girls in the age group 14 to 17 attend secondary schools as against 35 percent of boys.

While reported literacy among the female population has increased from less than 1 percent in 1901 to almost 25 percent of the female population in 1981, and the number of literate females per thousand males increased from 68 in 1901 to 498 in 1981, the gap continues.

Various economic and social factors contribute to lower participation and retention rates among girls in school.

2. by Barbara A. Yates

First, female children are responsible for tasks such as the care of younger siblings while their mothers work in the fields and frequently for grazing cattle, weeding, and, harvesting. Such tasks preclude their attendance at school. According to the 1974 report of the Committee on the Status of Women in India, rural girls have more work responsibilities than boys.

Second, parental perceptions of the value of formal schooling vary based on socioeconomic class. The high rate of illiteracy among rural parents leads many to devalue education as a household resource. Moreover, many large landholders who employ children as agricultural labor are not eager to see them in school.

Third, social factors (e.g., early betrothal and marriage, aversion to coeducation, especially after puberty, and parental apathy to education of girls) have been estimated to account for 25 percent or more of the school dropouts among girls in India. Lack of women teachers, lack of proper security measures for girl students and women teachers, and lack of physical facilities in schools, especially separate restrooms for girls in mixed schools, also contribute.

Fourth, lack of transport facilities to secondary and higher schools discourage the attendance of girls.

Fifth, the incidence of paid child labor is high in India, especially among poorer households. For marginal farmers and landless agricultural laborers, earning a livelihood is a family endeavor involving both children and adults. Households below the poverty line are unable to forgo the income brought in by working children.

Besides the above-mentioned social and economic factors, irrelevant curricula or fixed school hours which do not suit girls in rural areas also adversely affect the participation of girls in schools.

The Changing Scene³

In India primary education is offered free of charge and, in many states, even high school education. In Gujarat, not only is education free for both boys and girls until high school level, but, beginning in 1985, higher secondary, college, and university education is free for girls, according to an announcement of the state department of education. These reforms will certainly benefit middle-class girls now in school, but whether it will increase girls' participation is yet to be demonstrated.

A number of steps have been taken to promote the education of females. These include: encouraging women to obtain teacher's training, especially at the preschool and primary school level; encouraging educated wives of male teachers to take up teaching and appointing and transferring teacher couples together; increasing employment of female teachers, especially in girls' schools, and providing housing or enabling them to commute to the school daily from their homes; establishing separate schools for girls where possible; and (in Gujarat) providing free education for girls and women from primary school through university.

As a result of these steps, a steady increase in enrollment has been seen at all levels. The rate of female student dropouts is still high toward the end of elementary and middle school, but this is more due to social constraints than economic ones. It is therefore felt necessary to identify and cover this group of students under the nonformal education component of vocational education. The National Adult Education Program, known as NAEP, as well as some programs carried out by social welfare boards, prepares younger girls for a wage-earning occupation or to become good housewives.

Increased education for women has made a great impact on everyday living. Women are curious to know about various innovations and products available on the market for household use. They are aware of their rights and privileges as daughters, housewives, and citizens, although they cannot exercise those rights freely due to the prevailing social system. There is a definite change in the quality of life. They demand services which they know should be provided. Women organize voluntary interest groups known as mahila mandals, through which they undertake various developmental and welfare programs. They demand better work from officers appointed by government and nongovernment bodies. They have learned to voice their opinions.

A major change is seen in women's clothing. Young girls in villages no longer limit themselves to traditional dress. Those in the backward and tribal areas still wear the traditional garb, but there is a steady change. Also, women, like their husbands, are taking other than agricultural jobs. Education has influenced the standard of living of rural homemakers. This change seems to be faster in rural families of higher socioeconomic groups than in low-income groups. These are positive indicators of social change and the influence of women's education on society.

References

Government of India. Ministry of Education and Social Welfare. 1974. Towards Equality: Report of the Committee on the Status of Women in India.

THE SCHOOLS OF RUSTUMPURA: A CASE STUDY
by
Barbara A. Yates

Education within the village of Rustumpura reflects the general trends and obstacles to the participation of girls in education in India. There are three schools in Rustumpura: a creche for children two to five years old enrolling some 30 village children, a primary school with seven grades (Standards I to VII) enrolling 269 pupils of whom 83 (or 30 percent) are girls, and a secondary school with three grades (Standards VIII to X), enrolling 150 pupils including 25 girls (17 percent). Beginning with Standard V the primary school accepts boys and girls from neighboring villages which do not have a complete primary school nor a secondary school. All classes are coeducational, a situation not always true of rural Indian schools.

Primary School

An interview with the head teacher of the primary school revealed some of the obstacles to girl's education. The head teacher was in his classroom, a simple room within a six-room rectangular building. He teaches Standard VII, the highest grade in the primary school. His classroom also serves as the school office. During our interview he was interrupted several times by other teachers coming to check out chalk and other supplies from the cupboard. The children (including two girls) were seated cross-legged on the floor. Of the boys only twenty (out of 30 enrolled) were present. There were two windows at the back of the room, without glass panes. The door remained open. Each student had a small slate, and in front of each were stacked three or four frayed textbooks. There was a pile of blankets in the corner, used in cool weather.

I asked the head teacher why only twenty boys were present. He said absenteeism is frequent, especially in Standards II through IV. Few children attend regularly, because they are required to graze cattle. Of girls, he said, "Parents don't let girls study much after Standard IV or V." Some families are poor and need the girls at home to sit with younger siblings while the parents are in the fields. In neighboring villages (from which the school draws many pupils) parents will not send girls out of the village because they believe the girls cannot be properly supervised. The two girls present were from Rustumpura.

The headmaster said that because Rustumpura had more "backward class" families than higher class families fewer girls come to school. This village also has more Muslims than usual in the backward classes. Such Muslims, he stated, "don't send girls to school." He immediately gave an example of a Muslim boy in Standard IV whose family was already talking about his marriage. While marriage in Muslim families is now somewhat later because of laws against child marriage, nonetheless fewer children are sent to school.

Of the two girls in Standard VII, both have fathers whom he described as "more modern." One father is a clerk in the village secondary school and of a higher caste (Baniya). The other, from a backward caste (Tadavis), nonetheless owns his own shop.

Since many of the boys are from other villages, Rustumpura has a hostel. Typically, boys live in the hostel beginning with Standard VIII. Children also commute from other villages as early as Standard I.

Baria is the majority caste of Standard VII boys. This fact is true also in other standards. Baria predominate because they comprise the largest percentage of the population in Rustumpura and neighboring villages. Other castes include Vasava, Tadavis, and Nayaks. There are about ten harijans (untouchables) out of a total enrollment of 269. The low number of harijans, according to the head teacher, is due partly to a low percentage of harijans in Rustumpura and neighboring villages. A few boys are Muslims.

The headmaster related that a recent survey showed 15 six-year-olds in the village, of whom only 10 come to school. The reasons given for the five who do not attend were multiple. First, the parents are agricultural laborers and the children are needed to look after the house and younger siblings.

Children are also needed to graze cattle. Further, the children do not have proper clothes to wear or money to purchase books and slates. Frequently they do not have enough food to eat. Since having had breakfast was a prerequisite to being admitted to school, some children were not sent.

While no school fees are charged, parents must spend money on books, notebooks, and slates (approximately 30 to 40 rupees per year). Parents must also provide two sets of clothes (not uniforms), which cost a minimum of another 80 rupees per year. The average agricultural laborer makes 1,500 to 1,700 rupees per year as well as being given 30 kilograms of grains and vegetables. However, agricultural jobs are not available year-round and there are periods of unemployment or underemployment. If one figures total primary school costs at 120 rupees per year and if the parents were fully employed, that would be 7.5 percent of their income. However, since they are not fully employed, that sum could well go up to 25 to 30 percent of annual income per school-age child.

All standards in primary school open at 10:30 A.M. with everybody chanting prayers. From 11 A.M. to 2 P.M. there are four classes of 35 minutes per subject, with ten-minute breaks. From 2:00 to 2:45 P.M. the children break for lunch. Classes resume then until 5:00 P.M. Afternoon classes are usually devoted to music, art, and games because, as the head teacher stated, children lose concentration in the afternoon.

Gujarati is both a subject and the language of instruction. Hindi and English are begun in Standard V. Science in Standard VII includes hygiene, chemistry, and agriculture (covering soils, agronomy, fertilizers, pesticides, and plant diseases). There is now no school garden. One existed in the past but villagers let their cattle graze on it so the garden lost money. Mathematics, social studies, history, geography, civics, and physical education are part of the curriculum.

Space is a problem. There are six rooms and eight teachers, including the headmaster. Four are men and four are women. There are only six classrooms for seven standards, which include two Standard V's, so there are eight separate classes. One class uses a neighboring open-air building and another class uses the porch of the office of a large landholder.

A free lunch of rice and dal is provided for some children at the school. One reason for sending children to school is this free lunch. The children line up on the school veranda, girls in one section and boys in another. They sing grace, then they eat with fingers. Pupils either bring a dish from home or they eat on a large green banana leaf. The better-off children go home for lunch.

Absenteeism in the primary school is about 30 percent, depending on the child labor needed at home. There is a rapid dropout between Standards V and VI because children from neighboring villages encounter higher standards in the primary school in Rustumpura. There are more girls than boys in Standards I and II, but at Standard III enrollment of girls is cut in half. The decline in the number of girls continues through Standard VII. The increase in the number of boys from Standard V through Standard VII is due to the influx of pupils from neighboring villages.

The legal requirement for teacher preparation is completion of the secondary school certificate (ten years of schooling) plus two years of teacher training. However, teachers who have been on staff for twelve to fifteen years--all at this school fit that criterion--need only to have completed Standard VII.

The head teacher estimated that, of the thirty-two pupils in Standard VII, about 22 to 25 (about 75 percent) would pass the Standard VII final examination. All would probably go on to Standard VIII in the secondary school and 80 percent will stay in school through Standard X. About 40 to 50 percent (the secondary school principal said 30 to 40 percent) will pass their Secondary School Certificate (SSC). Those who fail will not continue. Of the 40 to 50 percent who pass, only 10 to 12 percent will go on to Standard XI and XII, mainly because of lack of money.

When the headmaster was asked if he thought the new legislation providing free tuition for girls through college would have any effect on local girls, he thought it would have little. First, there is already free tuition in primary schools. Secondly, social reasons preclude the attendance of girls.

The headmaster estimates that in the village (population 1,400 to 1,500) about 5 to 7 percent (70 to 75 persons) have achieved their SSC. Some stay in the village and engage in agriculture. Others commute to the city or leave the village permanently. Of those women in the 5 to 7 percent, none graduated from Rustumpura secondary school, but came in as wives from outside.

Secondary School

The secondary school covers Standards VIII to X. There are a total of 150 pupils, of whom 25 or 17 percent are girls. About 5 to 7 pupils are from Rustumpura, the others from neighboring villages. Two of the girls are from Rustumpura. The other girls commute distances of three to six kilometers. Only 5 to 7 children come by bus. Forty boys are housed in the hostel, but none of the girls.

The secondary school consists of three self-contained classrooms, a resource room for science, a small library, a staff room, a reception room, and the headmaster's office. There are 61 pupils in Standard VIII (7 to 8 girls); 51 pupils in Standard IX (6 to 7 girls); and 40 students in Standard X (10 to 11 girls). The higher number of girls in Standard X is due to social promotion.

The headmaster explained why there were fewer girls than boys. Usually only girls with educated parents go to secondary school, and, therefore, they tend to be from higher castes and classes rather than the backward classes. The reverse is true for boys. Those few backward-class girls attending have parents with some education and/or fathers who are regularly employed, own shops, or work for large landowners. However, once girls start Standard VIII, they usually do not drop out. This fact is helped by the social promotion policy. The headmaster noted that one of the incentives for girls to remain in school is to qualify for better husbands, particularly those from higher castes or classes.

The curriculum in the secondary school includes Gujarati as a subject and the language of instruction, Hindi, English, Sanskrit, social studies, mathematics, science, physical education, and drawing. Beginning with Standard X, students must choose one of two streams: science or commerce. This choice is based on performance in Standard IX, parental and student interest, and teacher evaluation. Most students choose commerce because the nearest higher secondary school (Valghodia) has only a commerce option. Depending upon choice of stream, math and science become differentiated. Those in the science stream (12 pupils) study algebra and geometry, while those in the commerce stream (28 pupils) continue to study arithmetic. Science-stream pupils begin physics, chemistry, and biology, while commerce-stream youth concentrate on physiology and hygiene. There is no home economics or vocational education.

Most of the 12 pupils in the science stream will pursue a technical school certificate, not Standard XI of the secondary school in Valghodia. Those in the commerce stream may go on to the senior secondary school in Valghodia. Most girls stop studying after Standard X, but one or two might enter certificate programs in nursing. Such students could be either from the science or commerce streams, but most girls take the commerce track.

The majority of boys are from backward classes, because in Rustumpura the percentage of the population in the backward classes is high. Also, the hostel facility is available only to boys of backward classes, scheduled castes, and scheduled tribes. Scheduled castes include Chamar, Rohit, Vanakar, Bhangi, and harijans-Punji. Scheduled tribes include Bhils, Vasava, Tadavi, Rathwa, and Nayaks. The Baria, a bit higher class, is well represented in the secondary school because they predominate in the population.

The entire staff of the secondary school is male. There are five teachers and a male clerk. The teachers hold the bachelor's degree in science and arts plus a bachelor of education diploma.

The headmaster gave his version of problems of the secondary school. First, he stated that the children's IQ's are not "normal," either due to nature or nurture. Second, those children who come from the Rustumpura primary school are not prepared sufficiently because the primary teachers lack modern training. Thirdly, most primary school teachers are from the backward classes, due to the government's reservation policy.⁴ Moreover, teachers who have served twelve to fifteen years have only completed Standard VII. Fourthly, because of lack of preparation, primary teachers do not teach English satisfactorily, so that secondary teachers must begin English almost from scratch.

The headmaster estimated that of the 40 students in Standard X, only 30 to 40 percent (10 to 15 pupils) would pass the SSC. The SSC is an external examination given to pupils who have completed Standard X and who wish to take the examination. The high non-pass rate is partly due to the fact that the government has put pressure on secondary schools to give social promotion to backward classes, scheduled castes, and scheduled tribes.

4. This policy "reserves" a specified number of places in the civil service for persons from scheduled castes and scheduled tribes.

With regard to enrollment in each standard, the usual pattern is not always followed. The headmaster noted that usually 55 children are admitted to Standard VIII, of whom approximately 40 will be promoted to Standard IX. Of those 40, some 30 will go on to Standard X. This pattern is not true currently because of the reservation policy and social promotion.

Another problem cited by the headmaster was the poverty of parents. Many parents cannot send their children to secondary schools because of the cost. Even if they can afford the fees, they may not be able to afford books and necessary clothing. Many children earn their own fees through agricultural labor, usually on weekends. They also remain out of school, especially during the harvest and weeding season, to obtain extra money. Girls, too, take care of younger siblings but apparently are not paid for this work. The annual cost of secondary education is approximately 165 rupees per pupil. This cost usually precludes the attendance of children from agricultural laborer or other lower classes. Of these total expenses 10 to 15 rupees are for tuition, 40 to 50 rupees for books, and 100 rupees for clothes.

References

Acharya, Poromesh. 1985. Education: Politics and social structure. Paper presented at the Conference on Education and Social Change in India: Reinterpretations and New Directions, 10-12 June, at McGill University, Montreal, Canada.

Bhandari, R. K. 1982. Education development of women in India. New Delhi: Ministry of Education and Culture, Government of India.

Dass, Dayal. 1985. Development of technical education in India. New Delhi: Ministry of Education and Culture, Central Secretariat Library.

_____. 1985. Development of women and children in rural areas. New Delhi: Ministry of Rural Development, Government of India, and United Nations Children's Fund.

Government of Gujarat. Education and Labour Department. 1976. Gujarat years of achievements backward class welfare. Gandhinagar: The Government Central Press.

Jain, Anirudh K., and Moni Nag. 1985. Importance of female primary education for fertility reduction in India. Paper presented at the Conference on Education and Social Change in India: Reinterpretations and New Directions, 10-13 June, at McGill University, Montreal, Canada.

Lok Sabha Secretariat. 1985. National educational policy. New Delhi: Government of India Press.

Mitra, Asok. 1979. The Status of women: Literacy and employment. New Delhi: Allied Publishers.

M. S. University of Baroda Faculty of Home Science. 1981. SIP Plans: Waghodia and Sankheda, Final Report.

Paralikar, Kalpana and Anita Thomas. 1984. Field experience in Sonarkui. Baroda: M. S. University, Department of Home Science Education and Extension. Typescript.

EDUCATION OF TRIBAL WOMEN
by
Parul Dave

Formal Education

The tribal population in the hilly central belt of Gujarat numbers 3.7 million. It is comprised of the tribal talukas in Panchmahals and Baroda. Bhil, the biggest tribe of western India and known for its rich treasure of culture, is the most common tribe in Panchmahals and Baroda.

The principal occupation of the Bhils is agriculture; however, they also work as laborers on farms, factories, and road construction. Their economy is one of hand to mouth. In a survey of 548 families conducted by Dave, Diwakaran, Majithia, Meena, and Vaiota (1983) in Limkheda taluka of Panchmahals, it was found that the majority of the families had less than 2 beeghas (one acre) of land holdings, and over 50 percent of the families had a per capita income of 50 rupees or less per year.

All the mothers and half of the fathers were illiterate. The educational level of the remaining fathers ranged from primary to secondary school. Education of children was not considered important by many parents. The reasons given were: children have to help on the farm, they help in grazing cattle, school is very far, the teacher is irregular, children don't want to go to school, and education has no value, especially for girls. Those parents who thought that children should go to school gave reasons such as: school children get snacks, can get better jobs, and do better farming.

Bhil Seva Mandal, a voluntary organization, has a number of residential schools for boys and girls. In contrast to the government-run schools where the enrollment of children is much less than the number provided for, Bhil Seva Mandal schools have to refuse admissions to many. The main reason, according to the organizers, is that education in schools run by Bhil Seva Mandal is more relevant, because farming and animal husbandry are included in the curriculum.

Adult Education

Literacy classes for adults are conducted under the auspices of the Directorate of Adult Education of the Government of India. To make the classes more interesting and relevant for women and adolescent girls, the program includes such topics as child feeding and weaning, childhood accidents, responsible parenthood, cleanliness of self and surroundings, and care of the exceptional child.

Supplementary Education: A Case Study in Panchmahals

A project was undertaken by the Faculty of Home Science, M.S. University of Baroda from 1979 to 1985 to find out the problems associated with under-utilization of health and welfare programs planned and implemented by the government in Panchmahals. The emphasis was on the services for young children and their mothers. One of the major objectives was to prepare modules for parent education, preschool teacher training and training of health functionaries.

On the basis of initial exploration of child-care practices and utilization of local and government services for the welfare of women and children, a program was planned for women to develop their understanding of their political rights and duties; create awareness of programs and services provided for them and of advantages of these programs; work out ways to overcome health and welfare problems and increase usage of existing services; develop positive attitudes towards responsible parenthood and planned parenthood; increase their motivation to avail themselves of family planning consultation; increase their awareness of the causes, preventive and remedial aspects of common diseases; promote knowledge about breast-feeding, weaning and balanced diet, utilizing available foods in Panchmahals; emphasize the role of play and education in child development; clarify the roles of a preschool teacher and a field-level health worker in carrying out services in the community; and emphasize the role of parents in cooperating with the functionaries associated with various services.

Experience with the program indicated that: (1) a home-based program serving groups of three to four families might be most successful in attracting participation and catering to individual needs, (2) considering the deep-rooted superstitions and beliefs of tribal women, long-term programs offered by field workers are likely to be more effective than one-shot programs offered by an outside agency, and (3) audio-visual aids are needed to clarify misconceptions and build positive attitudes.

References

Dave, P., M. Diwakaran, V. Majithia, D. Meena, and M. Vaiota. 1983.
Nutritional status of under fives in Linkheda, Panchmahals, Gujarat.
Department of Child Development, M. S. University of Baroda. Typescript.

EXTENSION TRAINING PROGRAMS FOR WOMEN by Kalpana R. Paralikar

Introduction

The origin of extension education and community development programs can be traced to postwar pre-independence days when a "Grow More Food" campaign was launched to promote self-sufficiency on the food front. This program was aimed at training farmers in improved farm practices. Soon after launching this program, planners realized that in order for food yield to be increased, it was necessary to develop the whole farming community--the landholder, the laborers, and the artisans and craftsmen who produce tools and equipment for farming. Therefore, the nation-wide Community Development Program was launched in India on the 2nd of October, 1952. Extension Education was identified as a process which could be used to bring about desired change in man himself, his environment, and man-created devices. Extension Education was viewed as a two-way process of identifying problems and issues in rural society and finding solutions with the help of experts. The extension educator was viewed as a catalyst or change agent in this process.

For the first two years after the initiation of the community development program, no need was felt for including rural women. However, in 1954 Home Science Extension was launched as a complementary program to the Community

Development Program, with recognition of women as partners in the progress of India. Home Science Extension training units were established to train female staff to work in villages. Such persons are popularly referred to as gram sevikas--persons who serve the village. The task of the gram sevika, looked upon as a multipurpose worker, lay not only in homes but extended to the farms, the school, and the community centers in the rural areas.

The objectives of the food and nutrition and agriculture program are to promote the adoption of healthy and nutritious diets by families within their available resources, and to teach ways of preparing foods to conserve nutritive values and methods of storing and preserving foods. Training for gram sevikas includes family foods and nutrition, clothing for the family, mother and child care, housing, management of the home, health and sanitation, handicrafts and cottage industries, agriculture, including kitchen gardening, dairy, poultry, beekeeping and farming, cooperatives, and methods for home science extension.

The activities of gram sevikas include teaching how to improve diets and food practices and to eradicate fads and fallacies, selection of foods for maximum nutritive content within available resources, and optimum diets for children and adults, including special diets for pregnant and nursing mothers, infants, and sick persons. On cooking foods, gram sevikas teach sanitary handling and safe methods of cooking different foodstuffs, and introduce new methods of food preparation, such as cooking vegetables without throwing away the water or cooking rice without straining the water out. In the area of food preservation, simple methods such as drying, salting, pickling and sugaring are taught. Pest control is emphasized. Attempts are made to help children in children's groups and preschools to acquire good dietary habits.

The agriculture courses aim at increase of food production in the villages to contribute to balanced diets for all. Women are taught through working on the farms of extension training centers. They learn the value of good seeds, manures, and improved implements, the preparation of compost, and the cultivation of two or three food crops important in the locality.

Other topics include kitchen gardening--preparation of soil, manuring, sowing, watering, weeding, plucking, sorting, and storing of vegetables; utilization of waste water and house refuse; planning the kitchen garden for the entire year, taking into account seasonal changes, climate, and locality; production of vegetable seeds and their storage; plant protection; protection of gardens from animals; and keeping records of produce. Fruit gardening includes the planting of papaya, banana, guave, lemon, and eapota, which can be grown in the locality and enhance the quality of the diet.

Dairy farming has been important training, particularly in Gujarat, known for its dairy cooperatives. A small dairy unit is maintained to help women to learn washing cows and buffalo, cleaning cowsheds, protecting animals from ticks and other pests, selecting feeds, milking in a sanitary way, caring for calves, and preparing milk products for sale. The value of milk in diets of nutritionally deficient persons is emphasized.

Poultry, another aspect of this training, includes the management of a small poultry unit, building roosts and nests, feeding poultry, preparing feed, protection of poultry from pests and diseases, keeping accounts of

sales, storage of eggs, hatching eggs by the hen and by incubator, and ways to increase the nutritive value of eggs and poultry. Egg consumption is encouraged to supplement inadequate diets. Women are also taught care of pigs, goats, sheep, pigeons, and ducks, and beekeeping, which includes maintenance of an apiary, breeding bees, domestication of local bees, and extraction, storage and marketing of honey.

After about a decade the planners at the central level saw the need for more specific programs aimed at providing nutritional aid. The Applied Nutrition Programme was established to address problems of vulnerable groups. This program offers a feeding program for children and for young mothers, both pregnant and lactating, through preschools, primary schools, and special centers. It emphasizes the use of community, school, and kitchen gardens to provide pulses, vegetables and fruits to supplement the cereals which are the staple food.

This effort was followed by several other extension programs which have a foods and nutrition orientation. Since health and nutrition are complementary, several nutritional programs are coupled with health programs. Nutrition is also emphasized under the Integrated Child Development Scheme which encompasses the food, nutrition, and health needs of children up to six years of age and of pregnant and lactating mothers. Functional literacy, too, is considered an important component of the ICDS program. Attempts are made to increase the literacy level of women and children through the use of spoken and written words and phrases required in performing daily functions.

The Mid-Day Meal Program is yet another food-oriented extension program operated through primary schools and manned by teachers. It is aimed at providing supplementary food to the underfed population. Standardized low-cost recipes are prepared under this program. Incentives to develop such recipes with locally available foods are offered to teachers and other interested workers and individuals.

SOCIALIZATION OF THE INFANT: TWO CASE STUDIES
by
Navaz Bhavnagri

In the following case studies, the socialization of two infants in Rustumpura are described with respect to (1) parent-child, other adults-child and child-child interactions, (2) the mother as a socializing agent in two- and three-generational households, and (3) the impact of traditional and modern values on parental aspirations for their children.

Infant Case Study No. 1

Champa and Vallabh bhai are Hindus of the Gujarati Baniya caste, which mainly consists of tradesmen. They reside on a street where people are of their own caste and similar social standing. Vallabh bhai's brother's family lives on the same street. Vallabh bhai is in partnership with his brother, owning a store which sells groceries, hardware, cloth and ready-made clothing, and other sundry items. They are comfortably well-off, own their own home, and have joint family property in another small town.

Their house is large, with an enclosed veranda with a large swing. The living space is furnished with metal beds, steel closets, wood cabinets, and racks for storage. There is a clean kitchen with gas and primus stoves and area for washing ingredients for cooking, also an indoor bathroom for bathing and washing clothes and a separate toilet. This household has irregular hired help to bring water from the well, mop, sweep the house, and wash the clothes.

They are in their thirties and are literate in Gujarati. The mother attended a city secondary school, and the father went as far as middle school.

Dipen, born October 8, 1984, is ten months old. He has two sisters, Vaishali, who is five and attends first standard, and nine-year-old Dipika, who attends fourth standard at the village school. Dipen, a healthy infant weighing 8 kilograms, has had all his immunization shots. He is plump with baby fat that forms small dimples on his knuckles and elbows. He has black, curly hair with less hair on the right than on the left side. According to his mother, this is the result of sleeping on his right side most of the time. Having lightly tanned skin, he is viewed as a fair-skinned child, according to Indian norms.

He is clean, and wears silver bracelets on both arms and a locket with a picture of his parents' favorite deity, Siji Bawa, on a black string to protect him from all evil. He creeps and is constantly moving and mouthing objects around the room. He swats objects with his fist and has not yet acquired finger and thumb opposition. He walks if an adult pulls him up, holds him, and supports him for a few small steps.

Mother-child Interaction

In this family the mother is primary care-giver for all his basic daily biological needs. Following are some of her daily interactions with Dipen.

Bathing: Champa prepares hot water on the gas stove, usually at 7:00 A.M. About half an hour before Dipen's bath, Champa rubs sesame seed oil gently but firmly all over his body. Then she exercises his body by crossing his hands one way, then another, and by pulling his legs up to his chest. Dipen is left on his mother's bed to coo while his mother pours the hot water from an aluminum container called tapeli to a metallic bucket and gets his clean clothes from the steel cabinet.

She then sits on a wooden stool six inches high in the bathroom, with her legs out straight. She places Dipen across her legs on his stomach with his head downward. The mother makes "shh-shh-shh" sounds as she pours water over him using a metal mug called a lotta. She says to me, "I do it this way because it is safe. There is little chance of water going up his nose." She soaps his back; then, tilting him a little towards her, soaps his front quickly while making soothing sounds. She pours water all over his back and then over his front, lightly cupping his face with one hand to protect his nose and eyes. She next takes a very little soap suds on her hand and soaps his face, then removes it with wet palms without pouring water directly on his face.

She wraps him in a towel and dries him, then briskly rubs divel, a type of hair oil, on his scalp. She pats talcum powder over him with a powder puff until he looks very chalky. Finally, she takes a dab of black greasy ointment

called kajal and spreads it with her index finger on the top and lower edges of his eyelids. She turns to me and says, "This kajal is non-adulterated, for it is made by me at home. I collect the dry soot in a vatk (i.e., stainless steel bowl) by making cotton wicks and burning them in divel oil. I mix this soot with pure ghee (clarified butter) and then I store this paste in a very small metallic box."

Sleeping: Dipen sleeps between his parents in their bed. The mother spreads a rubber sheet underneath the bedsheet so that Dipen will not soil the mattress. A small quilt is laid over the bedsheet on which Dipen is laid. Every morning she cleans Dipen and removes the soiled quilt and bedsheet.

Dipen sleeps in a cloth hammock during the day. She puts him to sleep by pulling the string of the hammock and then thumping the hammock away from her as she sings traditional Gujarati lullabies. After the lullabies, she sings hymns and recites passages from the scriptures in a sing-song fashion. She begins singing her religious songs in a slow, melodious voice and rocks slowly, but as the song progresses she sings louder and faster, repeating some chants again and again, and rocking rhythmically faster to the beat of her song. Later, she creates songs and ditties, inserting the names of Dipen's uncles and aunts who bring gifts to him. She finally stops as Dipen has fallen into a fast sleep.

Feeding: Dipen is breast-fed only. His mother complains that she has attempted to introduce some solids and offered cow's milk in a bottle but he has not accepted them. She thinks it is best not to force him but wait until he is willing. She reports that she feeds him on a schedule, with approximately one and one-half to two hours between feedings during the day. She also offers her breast as a pacifier when he cries. While feeding the infant she continues doing household chores, such as making wicks for lamps for her deity or rolling the Indian bread called chappati.

She reports that at night Dipen wakes up two or three times for feeding. If he cries a lot or has colic, her husband complains that Dipen is disturbing his sleep and asks her to go out on the veranda to feed him. She then sits on the swing, feeds Dipen, and rocks him or she paces back and forth, or gives him medicine for his colic. It is considered her responsibility to satisfy Dipen's hunger and need for comfort. She feels a slight resentment towards her husband for not helping her at night.

Overall: On the whole Champa feels it is onerous and taxing to take care of an active infant and two older children, attend to her husband's comforts and needs, and perform all the household chores. Once she spontaneously complained, "I am so tired of taking care of the baby all by myself constantly. I feel so very tired at the end of the day that I am on the verge of tears. I feel I alone have to take care of him and there is no one to help me."

On another occasion she remarked, "He (her husband) comes home tired and he tells me he does not like to hear all my troubles I have had that day, especially if I complain how exhausted I feel and how much Dipen has been bothering me. He says he likes to come home to a calm and peaceful environment. He is quick-tempered and he loses his temper when I complain.

But he is a loving father to the children and he always brings gifts and things for them."

Champa enjoys Dipen's company when she goes for a stroll in the village. During those walks she visits her neighbors or her sister-in-law or goes to her husband's shop. She claims that Dipen, too, enjoys those evening outings with her as she carries him everywhere on her hip. She considers these outings good for his physical health and to be intellectually stimulating for Dipen. She says that he gets to see new objects in the outside environment, that he is learning, and the change of scenery is good for him.

Father-Child Interaction

Dipen's father works from 7:30 A.M. to 8:00 P.M. seven days a week. His store is open on all holidays and festivals, except during Diwali, the Hindu new year. He typically takes breaks at lunch time and about four o'clock for tea and snacks, at which time he occasionally and briefly interacts with his son. In contrast with the mother's interactions with Dipen, which are of high frequency, longer in duration, and occur primarily during care-giving activities, the father's interactions with Dipen are low in frequency, of shorter duration, and occur primarily during play activities.

The following is an example of father-infant play interaction. When he enters his home at night, Vallabh bhai makes cooing and loving sounds to get Dipen's attention. He says, "Cooock, cooock, tiddit, biddit." He lifts Dipen from the floor by picking him up by his hands, lunges forward and fondly rubs his nose on Dipen's. He lets Dipen squat again, then pulls him to a standing position and then lets him flop down again. He repeatedly helps Dipen to stand and then lets him relax again into a sitting position.

After being pulled up about three times, Dipen urinates on the floor because he is not wearing underwear. Vallabh bhai asks his elder daughter to mop the floor and she obeys promptly.

Dipen now starts pulling his father's gold chain to which his father fondly says, "You silly, it will break." Dipen whines, and his dad gives him a drink of well water in a stainless steel tumbler. He puts Dipen on his knee facing outward, turns on the cassette player, looks at Dipen, snaps his finger to the rhythm of the music, and then smiles at Dipen. He next puts him down to crawl to his mother.

Sibling-Child Interaction

Dipen's two older sisters play with him and are given the responsibility by their mother to make sure that he does not enter the kitchen when she is preparing the evening meal. The gas and primus stoves are on the floor and it is unsafe for him to crawl in that area. When Dipen crawls into the kitchen, Dipika brings him back. Dipen again crawls into the kitchen and Vaishali pushes him out and puts her arm on the floor in front of him as an impediment.

Dipen is upset by her prohibitive behavior, and he begins to cry. Dipika takes him into another room to play a game in which Dipen has to crawl between her legs. Seeing this, Vaishali also imitates and spreads her legs apart in front of Dipen as he crawls forward. Thus, the older siblings play a dual role of playmate and parent surrogate.

Socialization Goals

Dipen's parents were interviewed regarding their aspirations for their children's future.

Education: The parents wish all their children, regardless of sex, to be given optimum educational opportunities in accordance with their individual, innate intellectual capabilities. A minimum education, according to the parents, is a secondary school diploma. If any of their children fall behind in academic work, they will be given tutorial help. At present a retired high school teacher is hired to help Dipika with her homework daily.

Champa supervises her daughters' homework. She asks them to read the lessons to her and to recite their multiplication tables. She regrets that since Dipen's birth she devotes less time to her daughters' homework. Champa and Vallabh bhai intend to provide their daughters with the same opportunities for college education as to their son. Sending their children to a coeducational college is not viewed as a problem, because they are already sending their children to a coeducational school in this village. The mother, educated in the city, spontaneously complained about the poor quality of education in this village. She reported that children often sit long periods without being given any instruction.

They want their daughters to have an education because in modern times men want educated wives. Champa also feels education for daughters is essential because it will give them the option of a career, in case of divorce. Champa's first marriage resulted in divorce. She considers herself lucky to have found happiness and financial security by remarrying.

The parents stated that children need religious education; however, the father feels it is of secondary importance to formal schooling, and that acquisition of religious education should be informal, and an integral part of child rearing and socialization in the home. The mother, on the other hand, feels that religious education is equally as important as formal schooling, and that parents should consciously teach at every available opportunity. For example, she regularly sings hymns to her children, and teaches Dipen to identify pictures of her deity. She also has taken her children to the city during special religious days and visited the temple with them.

The parents also stated that their daughters need instruction in household chores and child care to train them for future roles of homemaker and mother. They also feel that their son should be taught survival skills, such as peeling vegetables, cooking simple dishes, and dishwashing. He will need these skills when he lives in hostels for his college education or as a young adult when he finds employment in the city.

Occupation: They have no objection to their daughters' choosing careers outside the home and no particular preference for their daughters' careers. Champa proudly stated that a precedent has been set in her family, because her sister is a school teacher. However, they want their son to be employed in government service, because there is greater job security in the public sector than in the private sector. They definitely do not want him to take over his father's business for it is hard work with no holidays and fluctuating income. Champa feels that her husband had no choice since he had a limited education and therefore had to pursue the family's traditional business. She aspires to

a job in the city for Dipen. She prefers the city life-style, because it provides a better education for children, a higher standard of living, cleaner environment, and neighborhoods where people have the same life-styles as hers and where people speak Gujarati correctly.

Marriage: The appropriate age for their daughters to be married is twenty-four or twenty-five and, for their son, twenty-seven or twenty-eight. They will choose prospective life partners for their children, because they consider that to be their major parental responsibility. They will, however, show the prospective life partner to their son or daughter, and only if their child approves of the choice will the marriage take place.

They expect that their children's spouses will be from the same subcaste as their own within the Baniya community. They will look for persons of good character, from a reputable family, having an educational level comparable to their children's, with adaptive personalities, and who will accept the new family as their own.

Financial provision for the children: They do not have any life insurance for their children. However, they have opened a bank account for their daughters' college education and marriage. They are not planning to open a separate account for Dipen, since he will inherit all that is theirs.

Family size and the sex of the child: Both parents prefer a small family. Vallabh bhai felt that, with a small family, he could be a better provider. Champa said that she could give more individual attention to each of her children. Furthermore, having a small family makes it easier for her to attend to various family members' schedules. Last but not least, fewer births mean less chance of ruining her health through childbirth.

Champa feels that society does pressure women to bear sons. Although her husband has repeatedly told her he does not prefer a son, she felt that he would want a son after having two daughters. She would not have had three children had her first or second child been male. Vallabh bhai repeatedly said that he had no sex preference, when interviewed.

Summary

These parents have clear, well-defined goals which reflect a mixture of traditional and modern values. These goals and values are likely to influence the direction in which they socialize their child.

Infant Case Study No. 2

Firdaus, born March 31, 1985, was four months old when these observations were made. Her mother is sixteen-year-old Seji, and father is twenty-six-year-old Makbul. They are Muslims, married for one and one-half years, and Firdaus is their only child. They rely upon Firdaus' paternal grandparents, with whom they live, for guidance and help in raising her.

The family is not rich, but lives in a rented home with another Muslim tenant. They do not own agricultural land, but they are not the poorest family in Rustumpura. Makbul is the primary breadwinner for a family of four adults and one infant. He works as a wireman in the Gujarat State Fertilizer

plant in the city of Baroda. He generally commutes by bus, but occasionally stays for a couple of days in a small rented room in the city. He earns 600 rupees per month, a good salary by Indian standards, but spends eight rupees daily on commuting, eating out, and other expenses. Additionally, he has the expense of his rented room in Baroda.

Firdaus' grandparents own a buffalo and a calf, obtained through a loan from the government rural development scheme. They use milk for household consumption and sell the remaining to the Baroda Dairy Cooperative.

The house has a main living space partitioned to form a kitchen area and a veranda in the front. The main room has a slightly elevated corner where fodder is stacked and the buffalo and calf are kept at night. They keep the animals indoors at night because of theft in this village.

They have a swing in the central living area, and a traditional wooden cradle used by Firdaus' grandmother for her children. They also have a hammock for the infant. There are three light-weight beds called charpoy, made of wooden frames with centers woven from coir ropes, which are stacked away along the wall. Thin mattresses, quilts made from old saris, are spread on these beds at night.

In the kitchen area is a stove that burns firewood and a primus stove. They have a bath area, with a low parapet wall on one side but no door, which is used for bathing and cooking. There are no toilets. The kitchen opens to their back yard in which is a vegetable patch and a compost pit. There is also a small fenced vegetable garden in front of their home.

Their home has a mud and cowdung floor and a loft for storing fodder. Since there are no cupboards or closets, all belongings are stored on shelves along the wall or in bags hung from nails in the rafters or on hooks on the walls. The home is electrified.

Firdaus is a normal healthy infant and is kept clean. She wears outfits made by her grandfather and a black and white bead bracelet on each wrist. The doctor has prescribed a tonic to be given three times a day to correct liver dysfunction and promote growth. She has a rounded face, large black eyes, mosquito bites on her cheek, and chubby limbs. Her forehead is darker than the rest of her face.

Both the parents are literate in Gujarati. Firdaus' mother has studied up to seventh standard and her father has graduated from secondary school. Firdaus' grandparents are illiterate.

Mother-child Interaction

In this family the mother is not the only care-giver for the infant. Both the grandparents are involved. Since the grandparents are elderly, Seji is solely responsible for chores, such as fetching water from the well at least four times a day, collecting firewood, processing and preparing food, washing clothes and dishes, and cleaning the house. They cannot afford hired help.

Her in-laws help by minding Firdaus. The grandmother always bathes the baby, and both grandparents put the baby to sleep. Toilet training and

dressing the baby are joint responsibilities of Firdaus' mother and grandmother, while feeding is Seji's responsibility.

Firdaus is breast-fed only. She is fed on demand--that is, when she cries and seems hungry--day and night and also sometimes in anticipation of need. For example, she is fed prior to Seji's trip to the well because Seji will be unavailable for awhile.

Breast-feeding time provides Seji with a little relaxation from the daily chores. This is not necessarily a private time between mother and child. She nurses in any part of the house and in the presence of male and female family members or neighbors.

Seji wears a below-knee-length dress called a kameez, with trousers to match called salwar. She wears a dupatta, two and one-half yards of fabric swung across her shoulders to cover her bosom. Her kameez has front openings so it is convenient to feed the baby, and Firdaus is held underneath the dupatta while nursing. Thus, the feeding takes place in complete modesty. Generally, men in India are comfortable, natural, and matter-of-fact when women feed their infants in public places, because saris and dupattas completely hide this from public view. Seji generally talks with other adults in the room when feeding Firdaus.

Father-child Interaction

The father reported that he does not interact with the infant. I, too, did not observe him interacting. Makbul said that Firdaus is very small and he did not know how to lift, carry, or play with her. He strongly believes it is a woman's responsibility to take care of the baby. Furthermore, he is at home very little--hardly long enough to interact with his daughter. He commutes to work leaving at dawn, returning after dusk. He relaxes by visiting his male friends from late evening until bedtime. He often chooses not to return at night and stays a few days in Baroda city.

Grandmother-child Interaction

The grandmother, approximately sixty-five years old to the best of her knowledge, bathes Firdaus daily. She talks to Firdaus while the bath water is heated on a gas pump. She says, "My Allah Peer (i.e., God-saint), help my rajahji (prince). How nice she bathes. My sweetheart is to bathe. Your granny will go and bring new dress and new pants....Allah, oh, Allah-Muhammed Ruallah." She pours the hot water into an aluminum wash basin and lays Firdaus on a large flat stone on the base of the bathroom floor. She squats and soaps her, turns Firdaus to rub her back, then she splashes water on Firdaus by hand and lifts her on her hip to dry her with a towel.

She rubs on hair oil made from peanuts and dusts the baby with Ponds talcum powder, saying, "My little white boogy man." The grandmother sings softly. The mother brings the dress, pants, a bonnet and a vest the grandmother chooses for Firdaus. She sings, "You little red one, you little red one," as she dresses her in the red vest. After dressing Firdaus, she applies black soot in the manner of an eyeliner on the edges of the child's eyelids. The mother then says, "Her new dress is ankle length. I thought it would be too big but it is becoming on her." The grandmother informed me that every third day she rubs the baby all over with oil before giving the bath.

Grandfather-child Interaction

The (approximately) seventy-five-year-old grandfather is a retired tailor who still works on his sewing machine and makes clothes for his family, including Firdaus. The grandfather takes the buffalo out to pasture and leaves it with an attendant who takes care of other villagers' cattle also. The rest of the day he relaxes on the veranda and plays with Firdaus or watches her while the mother and grandmother are doing household chores. If the baby is sleeping, he rocks the hammock from time to time to prolong Firdaus' nap, or adjusts the sheet over the infant. He calls Firdaus "Mia" as he holds her on his lap and talks to his old Muslim neighbor. He interrupts his conversation from time to time to shake a rattle.

Firdaus' mother comes by and says, "The baby has not urinated for a while so she may urinate on you, so let me take her now." She takes Firdaus, stands on the portico holding her with her legs apart, and makes s-s-s s-s-s sounds. The child urinates on the floor of the outside veranda. The mother pours water on that area, puts clean underwear on Firdaus, and gives her back to the grandfather. He fondly says, "My little daughter, you were going to urinate on me all right! Is that right?" Referring to the efforts of Firdaus' mother to toilet train her at four months, he says, "A child is malleable and can be molded the way you wish to mold her."

Socialization Goals

Firdaus' parents were not articulate about their aspirations for their daughter. Their answers were brief and not well formulated. However, they generally seemed to agree on long term goals and related values.

Education: The mother intends to send Firdaus to a government-sponsored preschool. She will be content if Firdaus continues to the fourth standard. If Firdaus does well academically, her mother will want her to study until she graduates from secondary school. Firdaus' father will be content if she graduates from secondary school. Neither parent has aspirations to send Firdaus to college, because they think by that time they will get her married.

They both feel strongly that Firdaus should have religious education. They intend to enroll her in special classes offered by the mullah (religious leader), to learn everything in the Koran. They stated that it is not essential to have formal schooling, but religious education is essential.

They also feel that learning how to cook and do the household chores is an important part of education and socialization. Throughout her childhood they intend to prepare Firdaus for roles as mother, wife, and daughter-in-law. Marriage is clearly a long term goal set for her by her family.

Occupation: They have no aspiration for a career for Firdaus. If they have a son, they hope he will be a government employee and live in the city.

Marriage: They want their daughter to be married in her late teens. The family will search for a suitable mate of the same Muslim sect. One of their main considerations will be that he earn enough to support a wife and family and that he get along with everyone. It is not important that he have an education or if he is a few years older than Firdaus.

Financial Provisions for the Child: They do not have any life insurance policy nor savings for Firdaus' future. If they are ever able to save, that money will be available for any type of emergency.

Family Size and Sex of the Child: The father said a family should be small, not more than two or three children; however, he could not describe the benefits of a small family. His wife, shy and embarrassed, only giggled.

Summary

Firdaus is being raised by three care-givers, mother, grandmother, and grandfather. There is a lot of laughter and joking among them. There is also a continuous stream of neighbors and relatives who bring Firdaus expensive toys and clothes made of velvet, trimmed in gold braid. They are a conservative family, influenced by the values of a Muslim society. These values will certainly influence the way in which they raise Firdaus.

GROWING UP IN RUSTUMPURA: PROFILE OF A DAY

by

Ranjana Dutta and T. S. Saraswathi

Daya bhai is a caste-Hindu marginal farmer and may be described as belonging to the upper strata of the poor because he has fewer than 40 rupees per capita income per month. His land is rocky, not irrigated, and yields little. He also works for other farmers. Somu ben, his wife, makes leaf plates, assisted by daughter, Shaku. Whenever possible Shaku picks cotton with her peers. Daya bhai often takes cotton to the city to be sold.

Dawn

The noisy chirping of the birds greets the summer dawn. Somu ben straightens her patched sari mattress on the hard dirt floor. Sonal, her six-year-old daughter, is nestled against Shaku, who will soon turn twelve. Her husband, Daya bhai, and two sons Dilip (almost 15) and nine-year-old Jila are asleep on the veranda. The calf tied in the corner of the room bellows again. Somu ben gets up, rubbing her perspiring forehead, ties the calf near the cow in the front yard, and picks her way through the cattle in the street to the privacy of the nearest bushes. As she nears the house she hears a familiar guttural sound--a groan, a yawn, and a plea to the family deity. That's her husband waking up!

Early Morning

In the flickering light of the lamp and the hearth in the kitchen corner, Somu ben cleans garlic. Seated near her, her husband and Dilip are just finishing their tea. Dilip has tended the cattle, giving them hay and water. The cows yield so little milk in the summer they have to keep a goat. Daya bhai is going to the city to fix a deal for the sale of cotton. When his wife asks, "When do you have to go," he answers, "By the second bus." Dilip says, "I'll come too!" "Then who will graze the cattle?" his mother asks.

She reminds Dilip to collect datun (neem sticks used to clean teeth) on his way back. Shaku slurps her cup of tea. Jila and Sonal are in the front yard, the latter still walking around with a datun in hand.

All the boys and men are ready to leave for the farm or to take the cattle to pasture. A friend yells for Dilip and they leave with the herd, carrying black earthenware water pots to brave the heat and thirst in the dry grasslands.

Daya bhai stubs his second bidi near the swing and goes for his bath. Shaku helps clean the dal (lentils). Jila is asked to run to the shop for some salt, cooking oil, and tobacco for her dad. Sonal keeps the fire going with dried cotton plants and settles down chatting about the neighbors as she munches last night's rotlas (unleavened bread) with tea.

The dal soup is ready. Somu ben warms a chipped earthenware pan to make jowar rotla (coarse-grained unleavened bread). The neighbor's daughter comes to take back their bucket to fill with water, and Shaku goes out with her. Jila plays with the pet calf in the front yard while Sonal assists in serving the morning food to her father. Sonal and Jila accompany their father to the bus stand, while Ma calls "aav jo" (see you) from the front yard.

Shaku is back from the first trip to the well, water-filled pots balanced on her head. Her mother takes the water pots, handing over empty ones for the next round. She smiles at a neighbor passing by as she picks up the broom and sweeps....She had better go soon to pluck the leaves (to make leaf plates for sale) for it will be hot as the day advances.

Forenoon

The village well is crowded with women and young girls filling water pots, washing clothes, and cleaning vessels. Shaku helps her friend draw water as they chat about the approaching fair. Shaku's friend wants to buy green bangles. "Will Shaku join me for work in the farm so we can earn some money?" Shaku nods and they decide on whose farm to go to.

Once home, her mother reminds Shaku that clothes have to be washed. "Clothes can wait," mutters Shaku, "I am going to the farms this morning." Somu ben instructs Shaku to clean the dung and hay from the front yard, soak the clothes, and not to go to far-off farms. The Dabor bus has come. It is past nine. Somu ben hurries across the fields to collect leaves.

Shaku calls to Sonal to help collect the cattle dung to dump in the compost pit together with hay. With envy, she sees the children going to school. No more school for her. There is too much work at home and her mother needs her help in making leaf plates, also. Sonal is quite happy not to go to school. The teacher beats the children and calls them dirty.

Shaku has just started washing the piled-up vessels when her friends peep in to say they are going to fetch clay. Wiping her hands on her shirt, and closing the door behind her, Shaku leaves with them laughing.

The community is buzzing--customers shopping, women at the well, children in the lanes. Laughter and screams can be heard through the morning as the barefoot children play gilli-danda (a game with two sticks), ignoring the scorching heat.

Noon

Cattle and farm laborers have started returning home. Dilip ties the cattle and sprinkles water on his sun-baked body. It is a hot day! He is hungry, and Shaku serves him the dal and jowar rotla cooked in the morning, adding a raw onion and green pepper to taste. Sonal eats with him and later watches him try to fit together the three parts of his broken transistor. It is put together and a popular Gujarati tune adds decibels to Dilip's accompanying whistle.

Returning from the field, his mother spots Jila at the top of the hillocks chasing chameleons with a long stick, and has him by the collar. "Here, we slog all day and this boy loiters around in the sun! Good for nothing!" She deposits her bundle of leaves, and asks Jila to change and give his clothes to be washed. There is a tear in the shirt. She hits him hard. "You brat! How did you tear this? Wait and see what I'll do. Let your father come home." Sonal and friends continue their game while Jila sulks.

Soon Shaku is back from the farm, pleased that she has money to spend at the fair. Mother and daughter cook rice for the noon meal. There are rotlas and vegetables left from morning. Somu ben bathes Sonal and has a quick bath.

Shaku has a hurried meal and is off to the well to bathe and wash the clothes. Sonal is scratching her scalp. The lice have multiplied again. Somu ben puts oil on Sonal's head and combs her hair, conversing with the neighbor who has dropped by with an infant. Jila teases the infant and makes him cry. Somu ben scolds him, so off he goes in search of his friends. Dilip and his friends are gambling (with real money) behind the school building. Jila watches, joining in their song parodies and laughing.

Evening

Somu ben and Shaku have been cleaning cotton and sorting leaves, and it is time to make tea. Dilip returns home for tea, then takes the cattle grazing once more.

It is almost 5:00 P.M. Soon Daya bhai will return. Somu ben orders the children to get on with the chores: Shaku to fill the water pots, Sonal to assist in lighting the fire; Jila to buy some groceries and check what vegetables the vendor has. The firewood is used up. The roof tiles must be repaired before the rains start. "This Dilip is no help. He doesn't even help in cutting wood. As for Jila, the less said the better," she mutters under her breath. Maybe she will ask her husband to help.

The father returns, and Shaku is called home to make tea. He changes clothes, checks the day's accounts, and settles down on the swing with a cup of tea. Sonal is seated, leaning against his back. Daya bhai greets a neighbor and helps his wife cleaning beans while she briefs him on the day's happenings. Yes, he will help with the wood and the roof tiles.

Dusk

The evening meal is ready. Daya bhai is on the hillock cutting wood while Somu ben gathers it into bundles and makes two or three trips home to deposit them. The girls are told to do the chores, tie the calf inside, remove the dry clothes from the fence, give rice water to the animals and so on. Dilip returns with the cattle and calls out to Jila and Shaku to help bathe, feed, and milk them. The girls and jump on to a bullock cart passing by. Others join in the joy ride.

The sun is down, chores are done, the lanterns lit. Soon the evening meal will be taken and slumber envelop the family, disturbed, perhaps, by a barking dog or crying infant. Another day is over; tomorrow will dawn....

PROFILE OF A TRIBAL CHILD

by

Parul Dave

Tribal parents in Panchmahal District, Gujarat, desire to have many children, hoping a few will survive. Desire for the male child is predominant because grown-up sons support their parents. In treatment during infancy and early childhood, however, parents make no differences between sons and daughters. No ceremonies herald the birth of a child, though superstition calls for an arrow to be left at the foot of the bed of the child a few days after his birth.

Since most households include an extended family, it is unusual for any child to be an "only" child. There are generally cousins, or there may be uncles and aunts who are still children. The child is never isolated nor unprotected. There is no generation gap at all.

Breast-Feeding and Weaning

The child is fed with goat's milk for the first three days after birth, then breast-fed, usually until the next pregnancy. The child is breast-fed on demand, and night feeding is common. The child suckles for a duration of one to eight minutes. While the mother breast-feeds a young child she soothes the child, but for an older child feeding is mechanical.

The child is weaned by the age of two and one-half years. The child is weaned either gradually, by offering him solid foods, or abruptly because the mother becomes pregnant, has insufficient milk, or leaves for out-station jobs. The child feeds on the usual diet of the family, given in a mashed form.

Food fussiness (which is rare) is ignored by the mother. The child usually takes initiative in picking up food and eating. The mother, usually the caretaker for the young child, serves him but does not feed him with her own hands. The child is not supervised while eating and, if unnoticed by the caretaker, often goes without washing his hands and face.

Cleanliness

There is no particular age at which the child is supposed to be toilet-trained. Instructions regarding place for elimination are given only after the child begins walking and talking. The child's urinating in the house is regarded as natural. The older child uses the courtyard for defecation, and the place is cleaned after he shouts for his mother or grandmother. The child is dependent on the mother to clean him until he is at least five.

Until age four, the child generally wears only an upper garment--a shirt or frock, often of the wrong size--or nothing at all. If the child soils his clothing, the garment is hung on a wire to be cleaned later on. The child may wear the same clothes a week or so without washing.

The child is bathed with water (warmed in winter) poured over his body. His bath is the mother's job until he reaches five years of age.

Sleep

The young child sleeps in a cradle until the age of three, unless another is born. A child normally takes afternoon naps until the age of three, put to sleep either by the mother, grandmother, or an elder sibling by rocking the cradle. Older children play in the afternoons and keep an eye on the younger ones. Flies are constantly present around the child's sleeping place, and at times animals are tied nearby. The child is covered with anything available--a shirt, bed sheet, sari, or a piece of cloth.

Play and Work

A tribal child is almost continually cuddled during infancy. His caretakers could be anyone among his grandmothers, aunts, older siblings, neighbors, or mother. The child becomes more independent at about the age of a year and a half. He moves around with the neighbor children or his cousins and plays with others in the group. The child is not supervised during play, but an older sibling is often seen giving instructions or warnings. The children use materials from the environment in their play. Thus, the tribal child grows up with little direct supervision from adults.

As the child grows he is gradually assigned responsibilities. Taking cattle for grazing is usually performed by children. A child as young as two years may play with a goat, leading it about. Because they are given work at a young age, tribal children are often not sent to school.

Education is not even an aspiration for the child. The parents do not realize its relevance. There is an attitude of acceptance by his parents of the nature of each child. The child is not forced into being what he is not, to hasten his learning.

Care of a Sick Child

A sick child is a worry to the parents, yet no care is taken to prevent illness. Treatment is offered generally when it is already late. Colds are common but no special attention is given to the child with a cold.

Summary

The general picture of the tribal child is of an independent individual capable of making demands on his parents and other caretakers for food and protection. A tribal child in Panchmahal grows up in a relaxed atmosphere with mother as the chief caretaker among siblings or grandmother, until he is five years old.

He is a secure, relaxed member of his family. Tribal parents are both accepting and protective of their child. He is socialized smoothly and at an early stage into work responsibilities. By our standards, his physical care is neglected. He is unkempt and meagerly dressed. Personal hygiene is absolutely disregarded--whether in feeding, toilet-training, sleep, or play. The child receives little supervision and has little opportunity and encouragement to pursue a formal education.

PART FIVE: COMMUNITY AND HOUSEHOLD RESOURCES

Both human and nonhuman resources are discussed in this section using case studies from four households. The first two papers provide an overall picture of resources and their use: work activities of women and their patterns of responsibility, money, durable goods and community resources. The two remaining papers focus on selected resources and their use: equipment and resources used in relation to the household food supply, and transportation as a household resource.

PAID AND UNPAID WORK - ACTIVITIES AND
OPPORTUNITIES IN THE RURAL AREA
by
Kamala Srinivasan

The primary agricultural sector in India accounts for nearly 45 percent of the Net National Product and provides employment opportunities for over 70 percent of the population. Generally low productivity and near-fatal dependence on the monsoon are its two main features. In arid regions with no irrigation facilities, as in parts of Gujarat, even big farmers (holding more than two hectares of land) might be living near the poverty level. Nearly 45 percent of the total work force in the rural economy has no land and is employed as farm labor. Thus, two concepts of significance for the rural economy are subsistence farming and the landless laborer.

The crop pattern is determined mainly by physical and economic factors and by government policies. In places with low rainfall, jowar and bajra (inferior food crops) are grown. Subsistence farmers are primarily interested in producing food for their own consumption, whereas commercial crops such as cotton, groundnut, and tobacco are grown mainly by big farmers. Usually when food and cash crops are both cultivated, the females are responsible for the food crops, while the males take charge of the cash crops.

Many farm laborers struggle for survival because of low wages (about five rupees per day) and high insecurity of job (which often depends on the vagaries of the monsoon). Strategies for survival include partial- or whole-family migration to areas where jobs are believed to be plentiful and having more children for more earners in the family. Poverty and family size are positively correlated, probably in part because of this practice.

Marginal farmers (with holdings of less than one hectare) and small farmers (with holdings of one to two hectares) are, like the landless laborers, dependent on rainfall, but, because they own land, they can draw on credit in times of scarcity. However, their higher social status carries with it higher social role expectations. Dowry is still in vogue, and even poor families provide ostentatious marriages for their daughters. The money lenders charge interest rates of two to five percent per month. Families can easily become landless within one generation.

The nature and amount of paid and unpaid work performed by women is determined by several factors. For instance, it is accepted by society that women of lower caste will perform manual work for pay, but with a slightly improved standard of living they are expected to withdraw from the labor market. Job opportunities are another limiting factor. In rural areas opportunities for paid work other than manual labor are extremely limited. This is especially true for women, because they tend to be excluded from many jobs in commerce or as artisans for reasons of illiteracy, lack of skill, sex, or caste. Thus, work for women depends mainly on whether their husbands are landless agricultural laborers or marginal, small, or big farmers.

1. The research work of students Rahana Dutta, Meera Gore, Renu Chauhan and Feroza Sultana was helpful in the writing of this chapter. Jigisha Shastri and Mini Cheema deserve thanks for administering the bulky interview schedule. Sheghufa Kapada helped in getting things ready in time.

Women who do agricultural work for pay belong mostly to the scheduled castes and tribes. They work in the fields with their men, often performing the same operations for less pay. Gender discrimination is practiced in both wage rates and work assignments. The more strenuous work, such as sowing and transplanting, is reserved for women.

Women are the first to be laid off when the labor force is reduced. The introduction of biological and chemical methods for improving the yield, the "green revolution," displaced many women because they were regarded as unfit to be taught such skills. What may be developmental for males may in fact be anti-developmental for women.

Women agricultural workers also must collect fuel for their households, get the water, and cook. The daily diet is routine and frugal; hence the burden of cooking is less than in a more affluent household. Childbearing is another heavy burden, but absence from work on this account may be as brief as four days.

Women living on subsistence and small farms also work in the fields. If capital is available, the women engage in poultry keeping, animal husbandry, or in cottage industries such as quiltmaking.

Such women spend an enormous amount of labor on unpaid work: labor in the fields; domestic chores such as cooking, cleaning, washing, collecting fuel, and carrying water; and other productive activities, such as tending to an animal, making a product for sale, and marketing surplus produce. Women on big farms, on the other hand, do not labor in the fields and have hired help for some tasks, although for reasons of tradition (i.e., caste) many activities within the household itself are done only by women.

The census enumerations classify workers as main workers, marginal workers, and nonworkers. In the 1981 National Sample Survey, a person was classified as a main worker if he or she worked for pay at least for six months in a year, and as a marginal worker if the period of paid employment was less than six months. Most women on small farms would be counted as nonworkers since all their work is unpaid.

Comparing one category with another, we note that insecurity of income is highest among women in the lowest class, that women's contribution to real income through unpaid work is highest among marginal and small farmers, and that women on the big farms enjoy the most security and leisure. The nature and extent of women's work is thus intimately related to social class, which sets its own limits to the freedom of women to participate both in gainful employment and in unpaid activities.

Case 1: A Muslim Household in Rustumpura Village

Murshida Bhanu, twenty-eight, lives in a house made of mud, clay, and bricks with her husband Miyamat Ali, thirty-seven, and their four children--daughter Raheka banu, nine, in third standard at school, son Mehbob Ali, five, in first standard, daughter, Saline banu in the bal mandir (kindergarten), and son Maqsood Ali, ten months. The family exhibits an interesting mix of the three predominant occupational patterns in the rural Indian economy: subsistence farming, local marketing of produce, and migration for employment.

Miyamat Ali is employed as a watchman in a Central Excise office in Baroda City. Commuting to work, as Miyamat Ali does daily, is not restricted to village populations. Even from Vadodara City many hundreds commute daily to Ahmedabad (100 kilometers to the north) or to Surat (139 kilometers to the south) and other towns, leaving their vehicles (scooter or cycle) at the railway station vehicle stand and taking the commuter train. This is due to two factors--concentration of job opportunities at some centers and high urban rentals. If Miyamat Ali were to move to the city to be near his place of work, he would have to spend possibly half his monthly income as rent.

The amount of Miyamat Ali's salary, determined by the central government scales, is in the lower middle-income range. Miyamat Ali additionally receives several fringe benefits, including three uniforms, an umbrella, shoes, socks, and a woolen suit for winter. The family owns a farm and four goats, one buffalo, and two calves, purchased in partnership with neighbors with the understanding that the offspring will be shared. The livestock produces three liters of milk per day, of which one liter is consumed by the family and two liters are sold to neighbors at four rupees per liter. Murshida keeps some poultry, too.

Based on land holdings this family is classified as marginal, since it owns less than one hectare. Theirs is subsistence farming, since the family consumes almost all of the produce. This pattern entails enormous physical labor, because the use of tractors and mechanized implements is not economically feasible.

Almost all the farm work is done by the adult family members, with Miyamat Ali helping on holidays. The parents-in-law go to the field at 5 A.M. after taking tea. Murshida attends to the cooking and prepares the children for school, after which she also goes to the field taking along food. She takes the child along if nobody is at home to look after him. Hired labor is employed by the family only occasionally.

Murshida does the major labor on the farm since her parents-in-law are old. She points out that transplanting and other operations are not only extremely strenuous but that one has to work continuously for several hours. Cleaning and storing of grain, for instance, goes on until late into the night during harvest season. The manual labor in the field includes weeding, plowing, sowing, transplanting, harvesting, threshing, winnowing, removing stones from the grain, and storing it in huge containers made of mud. Most of the produce is used by the family. Cotton produce is sold to traders if any is left after Murshida and her daughters have made quilts for the family. The family has an additional piece of land (which carries a 6,000 rupee mortgage) on which they grow toor dal and cotton. Apart from these sources of income, they have rented out a room as a godown (storage room) for 25 rupees per month.

Although Murshida does most of the farmwork, she would be recorded in the census as a nonworker. When the census is taken, Murshida would respond when male adults are absent. But whoever responded, none would disclose that Murshida is the main worker on the farm because it would be considered demeaning to their status. This attitude is not restricted to the Muslim community nor to Gujarat State.

Murshida does not mind the amount of unpaid work she puts in because she feels that she is giving her children a chance for a better life. She believes that it is not befitting for a woman of her caste and status to engage in paid work. The types of work done by Murshida come under the categories that Hanna Papanek has termed "family status production work:" (a) indirect support activities for the paid work of other members of the family, such as providing meals for agricultural laborers, (b) support for future paid work and status aspirations of children, such as helping them in their studies or relieving them of domestic chores so that they can study, (c) politics of status maintenance, such as social visits and exchange of gifts, and (d) performance of religious acts and rituals (Papanek 1985).

Murshida's household production includes preparing papads, papadi and sweets for festivals. She maintains a kitchen garden extremely well, getting vegetables for their own consumption and selling surplus. She also takes care of the livestock, cleans the shed, and keeps poultry.

Periodically, Murshida and her daughter set out to the hills for fuel collection. They leave at about eight in the morning and come back at noon bringing about two to two and a half maunds (40 to 50 kilograms) on their heads. They store wood for the monsoon, too. They carry water daily from a nearby well. Murshida does all domestic chores, such as cleaning, laundering, shopping (sometimes assisted by her husband), cooking, serving, and attending to the children. She enjoys only one hour of rest daily.

In this family, the husband contributes a major part of the monetary income while the wife is the main contributor of nonmoney income. Without Murshida's daily labor of about fifteen hours, the family would not be able to save anything from the monetary income of her husband.

Rustumpura, one of the backward villages in Vaghodia taluka, has been selected as a target village for social inputs by the government of Gujarat. The impact of infrastructural development is reflected in the activities of Murshida, as well as in the opportunities available to all women in the village. For low-income families, each item of daily life can assume crucial importance in their strategy for survival. To take the case of potable water, its availability has a work component. The farther the distance to the water source, the greater will be the demand for unpaid work done by the woman. Many serious community quarrels have originated at the water tap.

Murshida regards teaching or nursing as acceptable employment for women. However, the job opportunities in teaching or nursing in the village are at present nil. There are no factories in the neighborhood. Carpet-weaving was introduced as a cottage industry and women of the village can earn money by carpet-weaving, provided suitable training is made available.

Case 2: A Hindu Household in Jaspur Village

This household consists of Natwarlal Jethalal Brahmabhatt (age seventy), his wife, Kamala ben (age sixty-eight), a daughter, Nina ben (age forty-two and separated from her husband), a son, Aswin bhai (age thirty-five), a daughter-in-law, Meena ben (age twenty-nine), and their children, two daughters and one son. The family belongs to a high-caste Hindu Brahmin community and owns a farm of nine hectares on which they grow bajra, wheat, rice and tobacco.

Farming expense amounts to 12,000 rupees and receipts average 20,000 rupees, depending on the monsoon. Seeds are kept from one crop to sow for the next crop. In such a large holding as this, the owner's work is restricted to supervision of hired labor. Women of the household do not work in the field. The household keeps two bullocks, one buffalo, and one calf. Three liters of milk are produced per day, of which two liters are sold at four rupees per liter.

The cooking is done by the mother-in-law, Kamala ben. Meena ben's tasks are to get drinking water (15 minutes), serve food (30 minutes), wash utensils (30 minutes), wash clothes (30 minutes), shop (10 minutes), care for her children (no specific amount of time), and supervise their education (30 minutes). Nina ben, the daughter, does not participate in any domestic work at all. The other women get about two to three hours of rest daily. In this upper-caste family with landed property there is clear hierarchy of power. Cooking is the mother-in-law's prerogative; the daughter-in-law is only a subordinate figure. Nina ben, the daughter, is literally a nonworker.

Case 3: A Hindu Household in Jaspur Village

Kamala ben Rabari (age twenty-six) lives with her husband, Vasram bhai (age thirty), in Jaspur village with their three children. Rabaris are traditionally cattle rearers. Vasram bhai is employed as a watchman in a factory at Padra earning 500 to 600 rupees per month.

Like most rural households, Vasram bhai keeps milch animals--two goats, a cow, and a calf. The daily milk yield, just sufficient for the household, means more work for Kamala ben--animal care as well as keeping the shed clean. Grazing the cattle is a male job and is done by hired help, who are paid 30 rupees per month.

The kaccha house in which they reside has been constructed by the couple themselves, with loans for the materials made possible through the factory where the husband is employed. Every year they color and whitewash the walls before the Diwali festival.

Vasram bhai earns a good income although he has studied only up to the fourth standard. Since his place of work is not in the village, he may be considered to be a day migrant.

Kamala ben is a full-time housewife. She and her daughter collect fuel for the household, but the place of collection is very near. Tap water is also available nearby. Kamala ben rests about three hours each afternoon. Guests come frequently to chat over a cup of tea.

Although Kamala ben is aware of job opportunities--for example, in cultivation, as a dai (governess) or a midwife, or in Padra (about five kilometers away)--her caste prevents her from taking any paid job. Her husband also is opposed to it.

Case 4: An Agricultural Laborer's Family in Rustumpura

Chanchal ben, about forty-five years old, works whenever and wherever employment is available. She lives with her husband, Vithal bhai (about fifty-five), who is similarly employed; her married daughter, Pratap ben (about twenty-five); son-in-law Jayanti bhai (about thirty); granddaughters, Sumitra (eleven), Saidra (eight), Savitri (four); and grandsons, Suresh

(eight) and Sunil (eleven days old). Not even the adults know their birthdates or correct ages. Chanchal and her husband belong to the same Nayak caste and come from the same Nasvadi village. Their family has been settled in Rustumpura four generations.

The kaccha mud house in which they live is the ancestral property of her husband. In their backyard they cultivate maize, jowar, and vegetables. All the family members work on this plot, without which their struggle for survival would be even more precarious than it is. The family owns a buffalo and two calves, purchased on the installment plan from a dairy. At first the buffalo gave three to four liters of milk per day; at present there is no yield.

The wage for casual labor is five rupees per eight-hour day for both sexes. During the lean season, Chanchal works as a servant in two or three houses for 20 to 25 rupees per month per house. She sometimes is also given tea and grains. With fast-rising inflation, the real income of the family rapidly dwindles. Her husband works at construction sites during the lean season. They can seldom save, but whatever they can is put aside for the education of the grandson, Suresh, who is in second standard. All the other family members are illiterate.

Children above the age of thirteen are expected to take up employment. Processing of food, cooking, serving, fetching water and fuel, shopping, cleaning, laundering, child care, and maintenance of the animal shed are all female jobs. Grazing is done by the men.

Notwithstanding their poverty, Chanchal has her preferences in jobs. She is not interested, for instance, in making dishes and bowls out of leaves, work which is available in that village. Probably the uncertainty and time demanded is weighed against the low but certain wage of an agricultural laborer. Also, the small plot of land they own gives her a chance to put a reserve price on her labor. She and the other women have leisure time at the end of the day.

Case 5: Child Labor

Madina (age ten, in fifth standard) lives with her eldest brother, who is married and works as an agricultural laborer. The younger brother, a school drop-out from sixth standard, looks after the cattle. Madina's tasks before leaving for school are to bring drinking water from the well, which is not far off, clean the utensils, clean the animal sheds, sweep the floor, and wipe the floor with a water-soaked cloth. She also cooks when her babi (sister-in-law) is indisposed. After school, she is busy with household chores, and has no time to play. That Madina has to forgo interaction with her peer group probably never strikes her adult relatives at all. If Madina had been a Hindu, she would have had numerous opportunities to interact with the community in celebration of religious festivals, but as a Muslim there are few such opportunities.

Her younger brother had to leave school for grazing because the number of cattle had become large, and grazing is a boy's job. School education is not considered very relevant for the child's future. Even at a young age, a resigned view of one's future is taken. Low aspiration level and rural poverty seem to go together so that the former can be taken as an indicator of the latter.

References

Chauhan, Renu. 1983. Time utilisation for household work and its monetary value. Master's Thesis, Department of Home Management, M. S. University of Baroda.

Dutta, Ranjana. 1983. Socialisation in an impoverished agricultural community from an ecological perspective. Master's Thesis, Department of Child Development, M. S. University of Baroda.

Feroza, Sultana. 1984. A study of female labor force participation in development, its extent and impact on family living in rural Bangladesh. Ph.D. Thesis, Department of Home Management, M. S. University of Baroda.

Gore, Meera. 1983. Socialisation of rural adolescent girls from an ecological perspective. Master's Thesis, Department of Child Development, M. S. University of Baroda.

M. S. University of Baroda. 1980. Block development plan for Chhota Udepur Taluka, Vadodara District: A project sponsored by the Government of Gujarat. Project Report. Mimeo.

National Committee. Indian Council on Social Science Research. 1975. Status of women in India. Delhi: Allied Publ. Pvt. Ltd.

Papanek, Hanna. 1985. Family status production work - Women's contribution to class differential and social mobility. Paper presented at the Asian Regional Conference on Women and the Household.

Patel, Vibhuti. n.d. Women and work - Handbook. Bombay: Research Unit on Women's Studies, SNDT University.

Pradhan, Bina. 1985. Women, the household and agricultural development strategies. Paper presented at the Asian Regional Conference on Women and the Household.

Prasad, Kamta. 1983. Planning for poverty alleviation. New Delhi: Agricole Publishing Academy.

Thakur, Dalip S. 1985. Poverty, inequality and unemployment in rural India: Some conceptual and methodological issues in measurement. Delhi: B. R. Publishing Corporation.

Todaro, Michael P. 1977. Economics for a developing world: An introduction to principles, problems and policies for development. London: Longman.

ALLOCATION OF MONEY AND NONMONEY
RESOURCES BY RURAL HOUSEHOLDS

by
Rachel George²

Households are concerned with the acquisition and allocation of resources in order to meet family imperatives. Quality of life and level of living attained are determined by the manner in which acquired resources are allocated. In the ensuing paragraphs the acquisition and allocation of money and nonmoney resources by two households from Jaspur are presented first and this is followed by information about two households from Rustumpura. A concluding note with some generalizations is presented in the end.

Case 1: The Household of Kamala ben Rabari

Kamala ben Rabari's household is comprised of five members: Kamala ben, twenty-six, her husband, Vasram bhai, thirty, Ganga ben, twelve, Haresh bhai, ten, and Gasi ben, six years old. Kamala ben is a full-time housewife, and Vasram bhai is a watchman in a chemical factory in Bhaili, a nearby village.

The primary source of income of this household is Vasram bhai's job. Secondary sources include agriculture and livestock, which contribute to the real income of the household. Kamala ben also grows a few vegetables, but her production of sweetmeats, savories, and wafers is practically nil. She depends on the market at Padra, the nearest town, for these, especially during Diwali season, a festival associated with the new year of the vernacular calendar.

The few clothes worn by the children are either bought ready-made or tailored outside. Her own clothing comes from her natal family, as is the custom among Rabari households. Vasram bhai gets his clothing (uniforms, winter garments, and a raincoat) from his employer as part of his fringe benefits. At times he sells the clothing provided by his employer in order to buy clothing of his own choice for the children and himself.

Kamala ben owns the house in which they live. It adjoins her husband's parents' house and was built about four years ago. A major part of the finances for the construction work was a gift from Vasram bhai's brother and a small loan of about 2,000 rupees from his employer. The house has an enclosed veranda in the front, a living room, a kitchen, and a roofed back veranda with dwarf (i.e., low) walls. The house was completed in phases according to the availability of money and the flooring is to be replaced with tile in due course. A special feature is the walled compound with a metal gate.

This house is more spacious than other Rabari houses. Once in two or three years coloring is applied to the walls prior to Diwali. Like most in this village, this house does not have a water closet or bathroom. It does have water piped into its compound and stored in a small water tank just above the wash area in the front yard. Domestic animals--goats and cows--are kept on the front veranda. Fodder is also stored there, in the corner or in the loft above. The main room provides space for entertaining, study, sleep, and storage of utensils, furnishings, clothing and food supplies. The kitchen is used for cooking; storing of pots, pans, food supplies, and fuel; dressing; bathing by the women; and storing water.

2. Author wishes to acknowledge the services of Ms. J. Shastri and Ms. M. Cheema in collecting data from households.

Furnishings are minimal and consist of five cotton-taped cots, a high stool and a swing. Cots are used for sitting, sleeping, and drying papad and other foods in the sun. Storage space, provided by built-in cupboards, open shelves, racks, and wooden planks, is inadequate. Grains are stored in metal drums; pulses, spices, and condiments in tins or bottles; and water in clay pots. Often storage containers are placed on the floor.

The furnishings are limited to what is essential--20 quilts made by Kamala ben, a blanket, four pillows, and pillow covers. Household utensils and tools are also limited to those essential for daily needs. The costliest items owned by Kamala ben's household are a ceiling fan--a luxury rare in her village--and a transistor radio. She owns a little jewelry but it is pawned or sold to raise money in time of need.

Kamala ben does most of the shopping, but she and Vasram bhai shop together for small trinkets or jewelry. Perishables, grains, and other supplies are bought soon after her husband's pay packet arrives every month. There is not much variety, although she buys a greater variety of pulse and legumes and vegetables than most of the other Rabari households.

The household lives from hand to mouth and often runs into debt. No funds are available for the children's personal needs. Decisions about money are made mostly by Kamala ben, although Vasram bhai makes decisions involving credit from his place of work. Recently Kamala ben started a savings program for the household. The children's marriages will be a major expense in the future.

Case 2: The Household of Kamala ben Natwarlal

This household consists of Kamala ben Natwarlal, sixty-eight, her husband, seventy, her son, thirty-five, his wife, twenty-nine, her grandchildren, two girls and one boy, and her daughter, forty-two, once married but separated from the husband.

The household depends solely on farming for its living. Kamala ben's husband owns nine hectares of land. In addition to wheat, rice, and bajri grown for home use, tobacco is cultivated as a cash crop. The seeds are saved from the current harvest. Livestock also adds to the money and nonmoney income of the household. Kamala ben and her daughter-in-law add to the household's real income by making wafers, savories, and sweet-meats for home use.

Kamala ben's husband inherited the large, two-story house in which they live. He spent a considerable amount from his savings to renovate it. The ground floor is used by Kamala ben, her husband, and daughter for sleeping, and the first floor by her son and his family. During the daytime, the whole household uses the ground floor.

This household is economically better off than others in the village. In addition to spacious rooms, the house has a water closet and a bathroom. Water tanks are provided in the kitchen as well as in the front yard. Fodder for the animals is stored on the front veranda, where the animals are kept at night. The front room is used for entertaining, studying, and sleeping, while the second room is used primarily as a storeroom for mattresses, utensils, grains, and animal feed. The kitchen is used for cooking and dining and for storing water, foodstuffs, and the pots and pans.

The household has portable and built-in storage cupboards. Wall shelves, planks and racks are also provided in the rooms. The kitchen has a small platform with base cabinets, a feature that is unique in this village.

The household furniture includes essential pieces, such as cots, a swing used daily by the family, and two wooden chairs for guests. There is no separate dressing room. The furnishings include a minimum of quilts, mattresses, sheets, pillows, and pillow covers; also household linen.

A variety of foods are consumed. Money is allocated both for the provision of adequate food and for education of grandchildren. Labor is hired for maintenance and repair of the house. This household makes savings regularly and does not resort to credit at all.

Power to make decisions regarding finances is vested in Kamala ben's husband. Kamala ben makes decisions regarding household tasks. This household enjoys a better level of living than the Rabari household and most of the other households in Jaspur village.

Case 3: The Household of Murshida banu

This family consists of eight members in all: four adults and four minors. The household derives its money income from agriculture and the job held by Murshida banu's husband. Murshida banu and her mother-in-law manage the farm without much help from their men because her husband is away from home on his job as a watchman with the Central Excise Office at Baroda for nearly twelve hours a day. This family, like that of Kamala ben Natwarlal, grows rice and redgram, with cotton as a cash crop. Livestock is kept to provide milk for the household and surplus milk to sell. Rent is another source of income. This particular household has a variety of sources of money income, which is adequate to meet the bare necessities of the family.

Murshida banu's husband gets clothing, including winter garments and rain-coats, from his employer. Clothing for the rest of the family is purchased.

The house they live in, a semi-permanent structure, was inherited by Murshida banu's father-in-law. The family does the repair work themselves. Their furnishings are minimal, storage facilities are meager and the front room is crowded. Grains are stored in metal boxes and drums or earthen pots. Their jewelry consists of items Murshida banu brought as dowry.

Murshida banu allocates some money for future needs from her farm yield and her husband saves a small amount from his salary, too. Food for consumption is raised on the farm, and hence very little money is spent on grains or vegetables. Though this household is not as well off as Natwarlal's, credit is not a regular feature of its financial management.

Case 4: The Household of Chanchal ben

Chanchal ben's household includes nine members. All the adults are illiterate. This is a landless household that depends on agricultural employment for its livelihood. During off seasons, Chanchal ben and her husband support the family through casual work or paid domestic work. They own the small plot of land on which their house stands. The house is a kaccha structure with two small rooms and no bathroom and water closet. Chanchal ben gets water from the village well and goes to the village pond to clean utensils and wash clothes.

Furniture in the household consists of a string cot made by themselves. There is little space for the metal tins, matka, and clay pots which they use for storage. Only those utensils that are absolutely essential are found in this household. Food is bought from local shops as their daily income permits. They use a little of the milk produced by their animals and sell the rest to the dairy.

Often loans are obtained from landlords, lenders, and relatives. They have no savings. No specific decisionmaking pattern regarding money and nonmoney resources is apparent, although the male head is held responsible for all expenses. The economic position of this household is very poor, but there are many households like this one.

Community Resources

Households in Jaspur make little use of village resources, except for the schools. For medical treatment, credit, purchases of all kinds, and jobs, they go to Padra, the nearest town, or Baroda, the nearest city. Women remain indoors taking care of the house and children while men toil in the fields or in paid jobs to earn money income.

The Rustumpura households resort to medical, educational, and market facilities in the village. A majority of the women do not take up jobs, though more women here are in paid jobs than in Jaspur. Women from economically weaker households and of low social ranking work on farms here, as is true of Jaspur.

FOOD RELATED ACTIVITIES AND RESOURCES³

by
Rachel George

Storage and Cooking of Food Supplies and Water

Certain activities are performed by women in the households to process the food. These include measuring, cleaning (i.e., picking out stones), washing, draining, peeling, cutting, mixing, cooking on the fire, stirring, serving, and care of leftover food. Supplies are procured, from one's own field or from the market, and stored.

Shopping for grains, pulses, and other groceries in Padra, a nearby town with good marketing facilities, is usually done by the male head of the household. Women from higher castes do not go out of their homes and village. In households of lower castes, women are the shoppers for food. Supplies bought in bulk are brought home by tempo (a three-wheeled, motorized vehicle) or by bus. It is not uncommon for people to walk home from Padra, six kilometers away, with head loads after their shopping.

Grains and pulses are stored in aluminum containers, tins, or bottles by the women. Vegetables are not purchased in bulk and are stored on a plate. Spices, condiments, sugar, tea leaves, jaggery, salt and other supplies are

3. The author would like to acknowledge the contribution made by Ms. Kirti Chauhan and Ms. Bela Goel in collecting data for this paper.

stored in smaller containers. There is no orderly arrangement, some containers are stored near the cooking area, others are placed in the main room. They are stored on wooden planks fixed on the wall, in built-in cupboards, and on the window sill in the main room. In general, most supplies are stored in the kitchen.

Supplies such as onions and potatoes are stored in netted bags made of coir hung from the ceiling. Farm households that raise crops of rice, bajri, wheat or jowar and those which buy in bulk store these cereals in large, locally made clay pots or in metal drums. Preservatives commonly used are castor oil, neem leaves, and boric powder. These large containers may be placed either in the main room, in the second room, or in both.

Rural households are not always blessed with running water, although in recent years piped water is available in many villages. The village panchayat controls the water supply and may release water only for an hour each day. Where there is no piped water, it is obtained from wells, ponds, and rivers. In most households, water must be stored for the day's requirements for drinking, cooking, cleaning, and occasionally for bathing.

Water is stored in matkas--large-bellied clay pots--with a capacity of 20 to 30 liters. A household fills ten to twelve pots of varying sizes with water to meet the day's needs. A raised platform, with the cement moulded to hold the pots firmly, is a feature of most rural kitchens. Two or three pots are placed one on top of the other and the topmost closed with a cover of stainless steel or brass.

Filling the pots with water absorbs nearly an hour in the morning. Some households have water-storage tanks provided with water taps, into which water is piped. Women then need to carry water for drinking purposes only. There may be more than one tank, one outside, usually in the front yard, and the other in the kitchen.

Utensils and Tools for Cooking

Cooking utensils are of various materials, the commonest base being brass, aluminum, clay, and stainless steel. Traditional cooking vessels, generally of clay or brass, are rather rare. The current trend is to use pans of aluminum and stainless steel, the former being cheaper and easier to clean.

Flat or round-bottomed pans with straight sides (tapeli) are used for cooking rice and dal. For cooking vegetables, women use round-bottomed aluminum pans (kadai) with sloping sides without flat rim. To make tea, rural women use pans similar to those used for vegetables but made of brass. Households have a minimum number of pans, for example, three to five tapelis and one or two kadais for vegetables and tea. Milk is boiled in a stainless steel or aluminum tapeli. To prepare rotla (a flat bread), a roasting pan called tava is used. This is usually made of clay, although, rarely, one may find one of cast iron.

Cooking pans are not purchased with accompanying lids and the household may have only one or two lids. Often the women use a second tapeli or a plate as a lid. The households rarely possess pressure saucepans, but women sometimes place one pan on top of the other with the top one resting on a strong wire mesh and closed with a larger tapeli that fits tight on the bottom tapeli. They put dal in the bottom and rice in the top to cook them simultaneously.

The pots and pans are hung on nails on the wall or placed on wooden planks. Cleaning is done by scrubbing with ash or mud. The women take pride in keeping their utensils sparkling.

Daily meals are eaten off plates of stainless steel. Dal is served in small bowls or dishes called katoris or vatkis, in the case of higher castes, or in bowls of brass (tansali, similar to kadai) by the Rabaris and certain other castes. Harijans eat from aluminum pots.

Various tools are used for cleaning, washing, draining, sifting, cutting, mixing and pounding. For peeling and cutting, a utility knife is used. Cleaning grains and pulses is usually done in a plate or tali, as it is popularly known in Gujarati. Farm households use sifters with large and small wire mesh for wheat, rice, and bajri (a cereal), and a winnower made of weeds for winnowing the grains to remove husk and chaff. After winnowing any stones are picked out and the grains are stored in large containers.

All the women and young girls participate in the task of cleaning the grain. It takes one to three days. A sifter or colander is often used to drain water from washed grains and vegetables. Stones are used to pound and crush grains, pulses, spices and condiments. Some households may not possess a pounding stone, but borrow from households in the immediate neighborhood.

A wooden churner to beat curds is a "must" in most of the households, because seasoned buttermilk is a common item in daily menus. A tong is used for holding pots firm on the pot seat while stirring, to remove a hot pan from the fire, and to hold the tava while the rotla is grilled on charcoal. Other utensils are stirring spoons, turners, and perforated spoons to drain oil from fried foods.

Rotla is made once, at least, in the course of a day. To knead the flour, a flat large plate with raised edges, called a prat, is used. A wooden rolling board and rolling pin is used to flatten and roll the balls into shape, or women flatten the balls in their hands. The rotlas are cooked in a tava and placed in stainless steel or brass serving dishes or served straight from chulah to plate. Vegetables, rice, and dal are served directly from the cooking container into the plates or katoris.

Leftover food is stored in stainless steel bowls and placed in cupboards or shelves. During summer months leftovers are given to livestock, because they spoil by evening. None of the households in the village has a refrigerator.

In addition, rural households possess a variety of serving dishes-- plates, cups, saucers, tumblers, small bowls, lottas, tapelis, tiffin carriers, kettles, and cans. These usually are part of the dowry women bring at marriage. They are not used daily but are show pieces arranged neatly on wooden planks in the main room where visitors are seated. Buckets and ghada (brass pots) are also part of the dowry.

Rural households usually have a minimum of vessels for cooking and many serving dishes. Possession of a variety of pots and pans reflects the social standing and economic position of the household.

TRANSPORTATION AS A HOUSEHOLD RESOURCE⁴
by Frances M. Magrabi

Modern transportation affects the lives of village families in Gujarat. It is made possible by the existence of all-weather roads connecting villages with one another and with larger towns. In two villages, Jaspur and Rustumpura, buses stop six or seven times a day. Motor rickshaws are available for hire. Some families own a bicycle or motor scooter. Truck transport is available to take cash crops to market. Three families illustrate the impact of modern transportation on the activities and well-being of households. A fourth family seems to gain little advantage from the availability of modern transportation.

These case studies illustrate several generalizations--harmful impacts as well as beneficial ones, greater dependence on the larger social and economic system, and that modern transport is not necessarily accessible--or at least not equally used--by all.

Case 1: The Household of Kamala ben Natwarlal

This is a well-to-do household deriving its entire income from farming. The husband uses an animal-drawn cart for some agricultural work, and all family members occasionally go by bus to other villages for shopping or visiting, but for the most part they walk. When food supplies must be purchased, the women may take the bus to a nearby town where prices are lower, or they may go by foot--a walk requiring 45 minutes to an hour. Vegetables are obtained from a vender; milk from their own animals.

Most of their travel--to school, shops, health center, or to work in the fields--is within or near their village and they walk. When they sell their crops, motor transport may be used and their income is probably higher than if excess produce could not be transported and sold at a distance. Aside from this, their way of life appears to be little different from that of their parents or grandparents. Their dependence on modern transportation is minimal.

Case 2: The Household of Murshida banu

This family also owns farmland, grows crops, and owns animals which provide them with milk for their own use and to sell. The farm work, however, is done by the women. The husband boards the bus to Baroda at 7:30 each morning, six days a week, arriving at his place of employment two and a half hours later. The availability of bus service has made it possible for him to commute to a factory job, providing regular cash income for his family. Since almost all of the family's food--grain and pulses, vegetables, and milk--is home-provided by the women of the household, the family is able to save from its cash income.

Modern transportation has had little impact on the level of consumption by this household, but it has enabled it to add to its wealth. Impact on life-style is more difficult to assess, but one fact stands out: the husband-father is absent at least twelve hours a day for six days out of

4. The author is grateful for the help provided by her collaborators, Kamala Srinivasan and Rachel George, and their students in collecting the data.

seven. The wife-mother necessarily assumes responsibility for the day-to-day supervision of children and household. The similarity between this family and suburban families in the United States is obvious. Some degree of alienation of the husband from the intimate family group seems almost inevitable.

Case 3: The Household of Kamala ben Rabari

The first two households have made use of modern transport to enhance their income, but are not dependent on it for their basic sustenance. The household of Kamala ben Rabari is different: Without modern transport this household would be nearly destitute.

The difference is in source of income and household supplies. The first two households own agricultural land, on which is produced most of their food and at least some cash income. The Rabari family owns no land except the small plot on which they built their house (on credit) four years ago. Their entire income comes from the husband's employment in a factory, to which he commutes each day by bicycle.

This family's life-style is similar in many respects to that of a low-income, blue-collar worker in the United States. Everything must be purchased, except for milk. The family lives from paycheck to paycheck, and frequently goes into debt for household expenses. Shopping is done in a nearby village, reached by bus, where prices are lower. Modern transportation has enabled this family to achieve an income that is nearly adequate, if the wife manages well and shops carefully, but at the cost of dependency on infrastructure and the market economy.

Case 4: The Household of Chanchal ben

This household is little affected by the availability of modern transportation. As landless laborers, the members of the household work in the fields or as servants in other households in their village. They provide as much of their food supply as possible from a small vegetable plot and milk from their animals. Except for an infrequent trip by bus to visit friends or relatives, walking is their only mode of travel. Their employment and shopping are circumscribed by the distance they can walk. Unlike the Rabaris, who live in the same village, they generally make their purchases in the village rather than traveling to the lower-priced shops in Padra.

TIME AND TASK ALLOCATION IN RURAL HOUSEHOLDS

by

Ellen C. K. Johnson and Rachel George

People in every society use time as a resource. Within each household, time and energy must be allocated and essential labor divided, in order to satisfy household imperatives and the needs of household members. Some of these imperatives are the provision of cash income, food, and housing, and the care of children, the sick, and the elderly. How the allocation is done may vary enormously from household to household depending on such factors as the age, sex, and health of the members, their capabilities, the nature of the tasks to be done (given the family's particular situation and values), the monetary and other resources available (including labor-saving technology), and the socio-cultural and physical context in which a household is embedded.

This chapter will focus on family and household strategies related to time and task allocation and the division of labor within households in the Baroda District in Gujarat State in India. An extended case study will be presented. It focuses on household activities during a complete day and is based on continuous observation, spot checks on other days, and interviewing. Allocation of time and tasks in other households in the same village will be discussed. Data from another village in a different taluka in the same district will also be presented for comparison. These data were collected from a random sample of seventy-five housewives.

An Agricultural Household in Rustumpura Village⁵

The household selected for the extended case study is in the village of Rustumpura in Baroda District, Waghodia taluka. The household owns a moderate amount of land, five hectares, of which they actively farm three. The rest they rent out, or hire laborers to grow the crops. Their activities were recorded during one entire day and portions of other days. Interview data on their daily round at other seasons of the year and recall data on their activities on other days supplement the observations.

At the time the household was observed, there were six persons residing within the house--i.e., sleeping and eating there and sharing labor and responsibility. These persons were Ranchod bhai Shitabhai Chamar, forty-five; his wife, Wali ben, forty-three; their daughter, Madhu ben, twenty-five, and her son Suresh, four; their son, Magan bhai, twenty; and their daughter, Hansa, twelve. Usually Madhu ben and Suresh live with her husband and his family in a village not far from Baroda (about three to four hours away by bus because of poor connections). Ralan ben, wife of Magan bhai, is visiting her parents now because of a wedding in her family. This left the household short-handed, so Madhu came to help out because her mother, Wali ben, had recently been in the hospital with back trouble. (She had actually left the hospital because she was lonely and bored, not because she was well.)

Ranchod bhai and Wali ben have another daughter also, Manjula ben, who is eighteen years old. She lives in a village near Baroda with her husband and year-old daughter. Ranchod bhai and Wali ben had had two sons, but one died when he was in the third standard in school. The parents have no schooling, nor do their two elder daughters, but their son Magan has a secondary school certificate and Hansa is in the fourth standard. She will continue her education if she does well, which means marks of at least 70 percent. Manjula ben comes back to visit sometimes, and every few months Wali ben visits her parents for four or five days at a time. They live 60 kilometers away, near Baroda.

Wali ben and her husband came to this village twenty years ago from another village because Rustumpura is nearer to most of their land. Ranchod bhai is the youngest of five brothers. One stayed in the original village, Korabedi, and the other four moved to Rustumpura. Each brother owned about five hectares of land. The families of the brothers live near each other in the village and help each other with farm labor, especially at harvest time. Altogether, there are about fifteen workers. Usually each household does its own weeding, but labor is sometimes traded for this also.

The house in which Ranchod bhai and Wali ben live is located in a neighborhood of eight or nine houses at the eastern end of Rustumpura. Most of the houses here were built twenty years ago by Mr. Dalal's grandfather. In 1904, a well was dug at this end of the village, as most of the families here are harijans. Other villagers are uncomfortable about having them use the main village well.

(The harijans are officially allowed to get water from the main well, but custom decrees that others draw it and pour it into their water vessels. Not long ago some politicians came and wanted the harijans to challenge this, but they refused. Why should they bother, when their well also has good, sweet water?)

Ranchod bhai and Wali ben's house is made of mud and dung plastered over a frame of wood and has a red tile roof. In front of the house is a veranda with a wooden bench where people can sit and chat. The door frame and door are of wood and beautifully carved. Inside is a sitting and multipurpose room which contains calendars with pictures of Hindu gods, a string bed, and a large bag of fertilizer stored near the wall. To the right and through an open doorway is a stable where the animals are brought at night. This stable has a separate entrance to the front yard.

Behind the front room is an inner room used mostly for storage and sleeping. To the left are large grain-storage containers, bedding, a string cot or two, and several chests. On the right side of this room, clothes are hung on pegs on the wall. There is a stairway up to the second story, which is used mostly for storage (of some fuel, pots, an old chair, and other miscellaneous items), and also has a clothesline for laundry. Cups, metal utensils, and pots hang from the central beam of the house and along the wall of the inner room. There is a partition between this room and the kitchen. On the front of the partition is the puja place (worship shelf, where prayers are said).

In the kitchen area, behind the partition, is a chulah (clay stove), vented through the second story. Cooking utensils are hung on the wall or set on a shelf. Extra cooking fuel is stacked in the corner. On the right hand side is the waist-high clay shelf on which the water vessels are stacked.

Out the back door is a small backyard enclosed in a cactus hedge. Most of it is planted in maize, but there are also several trees, one of them a sweet tamarind tree used in making soap and shampoo. There is a small open chulah, for summer cooking, and a bathing place, a large flat rock with a nearby clothesline. Next to the house are parts of a wooden cart and a high stack of firewood and brush to be used for cooking.

Out in front of the house are posts where the animals are tied in the morning and evening. The household has a cow and a buffalo, a calf, two bullocks for plowing, and a goat. Their only milk at this time comes from the goat. When the cow and buffalo are giving milk, the family uses one and a half kilos of milk a day and make ghee and curd. Ranchod bhai or Hansa take the extra milk to sell at the dairy collection place in the village. The household also has three chickens, but they are too young to lay eggs.

The household owns and works its own fields. Most of their three hectares just southwest of the village are planted in hybrid cotton. Just east of the village, near their house, they own a small plot planted in cotton and vegetables. Their other land, farther away, is planted with cotton and jowar (a cereal grain), dangar rice (dry, not paddy, rice), and toor dal mixed. They hire laborers to do the work on this land, or rent it and then share the crop.

Agricultural decisions each year depend on the crop, how much labor is in the household, and how easy it is to find laborers. The fields the family work themselves are plowed by Ranchod bhai or Magan bhai. All the household members (except Suresh) weed and harvest. Hybrid cotton requires a lot of labor. It is more productive (i.e., has more bolls per plant) than the regular cotton, but it has precise water requirements, and needs fertilizers and pesticides. This year, with the late monsoon, the first seeding of cotton was unsuccessful and the fields had to be completely replanted.

Thus, this household has a variety of agriculture tasks to be done-- plowing, planting, weeding, spreading fertilizer and pesticide, harvesting, and marketing of crops. They also thresh jowar near the lake, with animals trampling the cobs. Chaff is blown away with large fans or the grain is tossed on sheets so the chaff will blow off.

In addition, there is house repair, daily cooking and cleaning, laundry, and pot-washing to be done. Animals must be fed, watered, cleaned, and milked. Their harness must be looked after, as well as all the agricultural tools. Fodder must be obtained, and cooking fuel. Water must be brought from the well.

There is also a child, Suresh, to be cared for. As he has a congenital foot problem which causes him to limp, he doesn't run about as much as other children. Hansa sometimes needs help with homework. And the more distant land needs to be managed. Some foods (e.g. onions, potatoes, garlic, and sometimes vegetables and fruit) and other goods must be purchased. Because the household owns its own land, though, the family can adjust schedules each day to suit their needs.

So what might they do in a day, and who does what tasks? The day described here is one in the monsoon season, early in August, during the time of cotton-weeding. Women do much of the weeding. They do less in the fields at times when the men are plowing or guiding the bullocks to drag the cutter to kill weeds between the rows. In the summer and winter, however, both men and women spend the whole day in the fields.

The day for this household begins at about 5:30 A.M. when Ranchod bhai and Magan bhai bring the animals out and tether them in the front yard. They give them water in a bucket and feed them the fodder which had been stored on the side of the front veranda the previous evening. This day the fodder is weeds which Wali ben had brought from the fields. The weeds had been washed and mixed with fresh grass collected from the roadside.

Inside the house, Hansa puts up the beds and bedding, and Madhu and her mother sweep the whole house and start the fire in the chulah. Hansa then milks the goat and makes tea using the milk. The men bathe, using warmed

water, brush their teeth, and take lottas (small jars) of water to the fields.

Then Madhu collects the night's accumulation of dung in a large basin and carries it on her head to the household's compost pile across the street. She makes four trips. Then she sweeps the stable area.

The first bus, meanwhile, rattles by into the village. The women brush their teeth and Madhu and Hansa wash the dung pan out front. Suresh is still asleep on a cot in the kitchen. Finally, Wali ben and Madhu bathe and do laundry behind the house. Today there is only a little laundry. When there is more, Madhu does it at the well. One by one, the others go outside the village with lottas of water. Some village households have latrines, but this one does not.

By 6:00 A.M. there is gray light in the sky and the neighborhood is obviously waking up. Several children are sitting in a doorway doing schoolwork. A woman across the street is washing pots. A boy comes over and chats. Madhu and Hansa go to the well, where Madhu brings up the water and fills pots which Hansa brings back on her head, two at a time. As she comes near the veranda roof, her mother comes and lifts off the top pot so Hansa can duck under. Then Hansa pours the water into the large clay water-storage pots on the shelf. Water stays cooler and fresher in the clay pots. Hansa makes two trips and then she and Madhu both return, each carrying several full pots. Then the house is swept out completely again.

By now Suresh is up and he goes outside the village with his grandmother. Wali ben and Madhu wash the vessels behind the house. The family next door are hitching their bullocks to the plow, but this household will just take the animals to the field to graze today. It is a little bit cloudy but it doesn't look as if there will be heavy rain today, as there was, all morning, several days ago.

By 7:00 A.M. Wali ben and Madhu are sitting on the floor in the front room cutting up vegetables while Hansa is sitting out on the veranda doing homework. Her brother goes to the shop to buy some onions and then helps her with her homework. Ranchod bhai is chatting with a neighbor.

At 7:30 A.M. Magan takes the animals to graze in the fields and do weeding. His father is sitting with Suresh, who is playing with a wooden plane (for smoothing wood). Wali ben is kneading jowar dough and making rotlas (large flat pancakes) on a griddle set on the chulah. Hansa is helping her. Madhu chops onions and cooks them, making curry.

Shortly after 8:00 A.M., a woman stops by and Madhu goes with her to spread manure in her fields. Madhu also takes a weeding knife with her. Later, the friend will work a day with Wali ben in this household's fields.

By about 9:45 A.M. Hansa is ready to leave for school. Several of her friends (cousins) have stopped by. Wali ben leaves for the fields with a large bowl in which to put the weeds and a weeding knife. The ground is still wet from rain two days ago. The weeds have to come out so the cotton plants can be fertilized and pesticides put on. Already there are caterpillars eating the plants.

Her husband will stay home this morning with Suresh, as Ranchod bhai was out working all day yesterday. Today he is repairing a pair of sandals for a family member. He gave up repairing sandals for others, as payment was not always made. Ranchod bhai also makes things, such as harness, out of leather and wood or rope. This morning he will carve the plank of wood to be dragged by the bullocks next to cotton plants to press the soil down and reduce future weed growth. Ranchod bhai will also repair broken strings on one of the beds. Men usually do this kind of repair work and string the cots.

By 12:15 Wali ben is back from the field with a large bag of weeds and grass to be used as fodder. She had stopped at the lake on the way and washed off the dirt. She sweeps the yard and mixes clay (stored under the bench on the veranda) with some dung and repairs a place on the verandah that had been dug up by a dog. The clay had been brought from near the river during the summer.

She bathes, serves her husband lunch, and he goes off to the field to watch the animals. By 12:45 Magan comes, has lunch, and goes back to the fields. Wali ben comes home to rest. Hansa returns from school at 2:00 P.M. for a half-hour and she will have some rotla. Then Wali ben will go back to the fields to collect more weeds and fodder for the animals. When she returns at about 4:30 P.M., she will bathe, clean the house, and begin dinner preparations.

By 5:15 P.M. Hansa returns from school. Her mother had swept the house and heated water so everyone could bathe. Ranchod bhai brings home the animals and Wali ben and Hansa help tie them up and feed them. Ranchod bhai goes back out to the other field to look at the crops. Sometimes he goes to the village shops. The goat, which has been tied near the house, is taken out east of the village by Ranchod bhai's brother's son, who lives next door. Suresh goes along. Then Wali ben bathes.

By 5:30 P.M. Wali ben is cleaning dal to cook. Neighbors stop by to chat. She is making khichdee of rice and toor dal. The fuel is dried cotton stalks. She or Madhu will also make jowar rotlas. Because the family does field work, they need the "heavier" grain. Madhu ben returns about 6:00 P.M., bathes, and then she and Hansa go to the well to get water.

Magan is now home. He bathes and then chats with his cousins. Children play in the street. It has rained a little or Magan wouldn't be home this early. When it doesn't rain and the bullock team are being used, he often doesn't get home until 7:00 P.M. By 6:30 P.M. Ranchod bhai, too, is back and he bathes.

At 7:00 P.M., after everyone has bathed, Ranchod bhai and Magan bhai go to the puja place. They light a small lamp and then Suresh helps light the incense from the lamp's flame. Magan tucks the incense into the door frame. Its scent wafts throughout the home. In the kitchen, dinner is almost ready. Madhu goes to get more water and Hansa feeds more fodder to the animals. Then the family eats, men served first and the women eating after. Suresh is hungry and eats with the men tonight. Sometimes he prefers to eat with his grandmother or mother. He can choose.

Then Wali ben, assisted by Magan, washes the vessels in the backyard, scrubbing them with mud. Madhu sweeps the house and also washes some clothes and hangs them on the porch. Hansa is sitting in the yard doing homework with neighborhood children around. The last bus of the night goes by.

After work is done is the time when, in the twilight, neighbors and friends stop by. Sometimes groups of people take a walk up the road. Friends from other villages may stop by, going to or from a shop. Except for putting in the animals, which Magan and his father will do, and putting down the string beds and laying on the mattresses and quilts, which Hansa will do, the day's work is done. Two houses away, white smoke is pouring through the roof. Several men had cut neem branches and now are burning the leaves to clear out the mosquitoes so everyone can sleep better. Some people leave the village carrying lottas. Wali ben goes out with Suresh. During the summer it is so hot that everyone sleeps outside, but now it might rain and it is cooler. Women sleep in the kitchen area and men in the front or middle room. If any of the women are menstruating, they sleep farthest from the puja place. Suresh usually sleeps with his grandmother but sometimes with his grandfather.

At about 8:30 P.M. it is truly dark and the animals are brought inside and the doors bolted. Family members may chat a little then, but soon they turn out the light bulb and they are usually asleep by 9:00 P.M.

What each day is like depends upon the season of the year, the weather, and the work to be done, especially the agricultural work, since this family derive their cash income from farming as well as grow much of their own food. If one household member has had an especially tiring day in the fields the day before, he or she may stay home and do more tasks around the house.

Magan may alternate days of working with the animal team in the fields and taking them out to graze to give them a rest, too. One day Madhu stayed home with her son. She had a lot of laundry to do at the well and also cooked the day's food. She had weeded all day the day before. That day Hansa went to school just before 11:00 A.M., having taken lunch to Wali ben and a friend in the near field. Her brother and father were in the far field that day, and Madhu took them their lunch.

Several days later, after the fields were drier, everyone went out to work in them, even Hansa before and after school. Suresh played at the edge of the field. At harvest time everyone is in the field from dawn to dusk, and cooking and other household tasks are done early in the morning and very late at night.

Who does what tasks may vary, too. Ralan ben usually gets the water but she is not yet used to the family's system of doing tasks. Wali ben's daughter tells her to rest and take care of Suresh while Madhu does more of the work herself. Magan also often takes on heavier tasks to let his father rest.

Wali ben said that no one in the family needs to be told what to do; everyone works without being asked. Labor decisions for the day are usually made in the morning when the family can see what the weather will be like. Everyone participates. Any family member can look at the crops and suggest what should be done next. This system of labor allocation works well because everyone is willing to work hard and there is a great deal of mutual love and respect among household members for each other.

There are some standard divisions of labor, though. Women get the water, do the laundry, and cook the food. Sometimes, when there is only one woman, a man may cook when that woman is menstruating. Women also usually take care of the fodder for and clean up after the animals. They collect firewood, but men bring back heavy pieces of wood and chop them up. Men usually herd the cattle, but sometimes females take out the goat. Men are responsible for farm labor involving the yoked bullocks. Women are responsible for weeding (though men also weed). Men do the carpentry; women make mud-and-dung house repairs. Often the men go to the shops, take the milk to the dairy (though children or women also do it), and market the crops.

Domestic tasks within the household are done especially during the earlier part of the morning (5:00 A.M. to 7:30 A.M.) and from late afternoon into the evening (5:00 P.M. to 7:30 P.M.). Fieldwork takes up much of the time between. Lunch for field workers may be prepared in the early morning.

Other Households in Rustumpura

In each village household, time and tasks are allocated depending on the individual situation. When a household owns little or no land and no shop, its members work for others, usually eight hours a day, as agricultural laborers or servants. Often the adolescents work, too. In Muslim households, women may go out, faces covered, to do laundry or get water, but few do shopping except with their husbands. Several, however, tend shops. Only the poorest Muslim women go to work in the fields, however, and then only at peak agricultural labor times, since it brings the family higher status when the women stay home. Thus, most Muslim households who own land hire field laborers. In farm households, the rhythm of the tasks is tied to the crop schedules and seasons, as well as to household maintenance needs. When households both own and work their own land, they can adjust their schedules more flexibly than households whose members mostly hire out to others to do agricultural labor.

In other village households, time and task allocation are related to the demands of shopkeeping or commuting or to providing enrichment and a better education for children. In these, as in more prosperous landowning households, women generally stay home to take care of children and do household tasks. These households own and use more goods. Some village Baniya households owning shops allocate time and tasks more similarly to urban middle class Baniya households than to agricultural households in the same village. Whether or not women work outside the home also affects time and task allocation, as does the possession of home labor-saving devices and the general level of technology of the household.

Rural Households in Jaspur Village⁶

Jaspur is a backward village, and the mainstay of its people is agriculture. Rural women here are mostly full-time housewives with a negligible

6. by Rachel George. The observations made in Jaspur are based on a study on "Demands on the Time of Urban and Rural Housewives," undertaken by the author with a Home Management Departmental Research Grant from the University Grants Commission under VI Plan. The work is not yet published.

proportion of their time in paid jobs. However, women of lower castes, such as marginal farmers and farm laboring households, work shoulder to shoulder with their men for their employer or for their own family's consumption. These women have to attend to their unpaid and paid farm work and household work every day and find it difficult to cope. Farm work includes a variety of jobs. The most onerous, back-breaking ones are assigned to women, while men do those farm jobs with higher-level technology. A unique feature of farming in this village is that transplanting is not done in paddy crops.

Rural women attend to a multitude of responsibilities in the course of a day. They organize and time tasks by relatively set-time events (as meals), whether tasks are to be done at home or away, and whether they have full control of a task or not. Many women often do several tasks at once, as child care and housecleaning or cooking. Paid help is sought by the very well-to-do in the village to get housework done, but most women do not because they can ill afford to pay them. Most of the help they get comes from family members. The more enterprising rural housewives raise livestock and grow vegetables for home consumption and sell surplus.

Home production of goods consumes a lot of the time of rural women. Papad, a wafer made of black gramdal, sweetmeats, and fried snacks are popular items made at home by the better-off in the village. Spices and condiments are powdered at home. Dry grains and pulses are also ground at home. Most of these are not daily tasks but done once in two weeks or once a month. Often women in the neighborhood help one another.

Rural housewives allocate much time and energy to food-related activities such as procuring supplies; storing, cleaning, and preparing food; and serving and clearing up; care of clothes, which includes collecting, soaking, washing, putting them on the clothesline, folding, storing, mending, and ironing; care of utensils, which includes cleaning, drying, storing, and getting brass vessels tinned; care of the house, which includes sweeping, mopping, rolling quilts and mattresses, storing items on shelves, and making quilts; care of children and other household members, including attending to personal needs, lessons, and socialization and subsistence needs; care of livestock, including washing, feeding, milking, grazing, cleaning the barn daily, and collecting feed; collection of fuel for cooking; fetching water; and care of the sick.

Men concern themselves primarily with farm-related work, care of livestock, grazing, helping to gather fuel, and chopping fuel wood. Shopping for goods in the nearby town or city is a male responsibility in households of higher social standing. In the lower castes, women go in groups to the nearest town, Padra, to shop for grains, household utensils, and jewelry. Men seldom participate in other household activities.

The physical facilities and services available affects the amount of time needed to perform household tasks. Poor rural households usually own a minimum of utensils and clothing. Door-to-door selling of fuel and vegetables eliminates the need for women to go to the Padra markets for these items. By way of storage facilities, rural households have shelves of sorts in the kitchen to store food supplies; however, most housewives store some items in containers on the floor. A separate area for washing clothes and electric lights is found in a number of Jaspur households.

Only a negligible proportion of households have a water connection in the kitchen, a kitchen sink, a cleaning area in the kitchen, or cooking gas in their homes, facilities which would reduce work time. A few rural households own time-saving devices, such as pressure cookers, which reduce meal preparation time. Some also have electric grinding machines. Grocery shops, bus stands, and a cooperative milk society are within close proximity, and the ration (fair price) store is about two kilometers away from most homes in Jaspur.

About one-third of the rural women in this area mention a cleaning area in the kitchen, electric lighting, and cooking gas as facilities they would like to have in their households. Community services such as a market place, large hospital, medical store, and fair-price store are facilities that they would like to have in the village.

A majority of rural housewives say they run short of time to accomplish all their responsibilities. When this happens they get help from other family members and work faster in order to complete their tasks. There are clear-cut, gender-based distinctions as to who will help with what. For instance, boys will assist by going to the local shop or taking cattle for grazing while girls help in all household care and cleaning jobs. During farming and harvest seasons, girls are kept home from school to help their mothers.

Rural women generally rest in the mid-morning, afternoon and evening hours. They have free time between noon and 4 P.M. and after 7 P.M. Popular leisure activities of rural women include personal care, relaxing, visiting neighbors, and mending clothes. Often their leisure time is spent at home with family members such as their children and mother-in-law. Rarely do they spend their leisure time during the day in the company of their men.

An Agricultural Family

Meena ben is a caste-Hindu housewife whose household depends on earnings from the farm, about nine hectares of farm land. The household consists of her husband and his parents, her three children, and her sister-in-law, who is separated from her husband. Her father-in-law, Natwarlal, manages the farm and makes decisions related to farm and house. Ashwin bhai, her husband, is an invalid and mentally deranged due to a previous illness and does not help in farming. Meena ben's father-in-law sees to the provision of essential facilities, such as running water supply in the kitchen and front yard. Women in this household are required to stay indoors and attend to household activities within and in the immediate premises of the house. Meena ben has to take care of her parents-in-law, but managing the household is her mother-in-law's privilege. She gets help from her mother-in-law, although her sister-in-law does not participate much. Duties are clearly specified.

In the morning, her mother-in-law cleans the utensils while Meena ben attends to the livestock, cleans the shed, gets morning tea ready, and serves it. All household members except men go to the kitchen to have their tea; tea is served to the men on the front veranda. Next Meena ben attends to her children. She gets her daughter ready for kindergarten and leaves her at the school. About 8:00 A.M. she cleans the house, attends to her husband, and makes lunch, while her mother-in-law takes care of the children.

In the afternoon, after serving lunch and cleaning up, Meena ben gets a break of two to three hours, during which time she indulges in reading, sleeping, mending clothes, embroidering, or playing with her children. Then she prepares tea for the family. After the evening tea, she sets about preparing dinner, which is ready by 6:30 P.M. Natwarlal returns from the field, washes, and relaxes in the front veranda with his grandchildren while Meena ben serves dinner in the kitchen. The family is fed. After the women have had their supper, the kitchen is cleaned. The day's work is done.

After 7:30 P.M. Meena ben is free and plays with the children, chats with the family, prepares beds for everyone, and puts her children to bed. By 8:30 P.M. she goes to bed herself, ready for the next day to dawn.

Meena ben spends most days in this way. However, during harvest and festive seasons, her work load increases. The grain brought in during harvest season must be cleaned and stored in large metal and clay containers. Preservatives are also put on. This cleaning and storing takes two to three weeks. During festive seasons such as Diwali, sweetmeats are to be made, the entire house cleaned, and the utensils kept sparkling. Meena ben attends to all these with help from her mother-in-law and sister-in-law. Participation by other women in heavy tasks of this nature occurs voluntarily.

Other Households in Jaspur

In households with lesser means, women have to attend to all the various household tasks. They do the shopping when their men are employed in factories in nearby villages or towns. Otherwise, men do most of the outdoor activities. Women help in the farm, get water, care for family members, attend to house cleaning, do laundry, cook, clean dishes, tend the animals, and collect fuel for the house and fodder for the livestock--goats, cows or buffalo. Women and their daughters attend to making chulahs (cookstoves), minor house repairs, and mud walls and floors.

Men do such tasks as preparing the fields, tilling, plowing, manuring, and sowing, while women weed the fields and work in harvesting. Labor is hired by the well-to-do and those who do not have enough helping hands in their households. Children run errands, such as to the grocer or the fair-price shop, and daughters help in household work. Carrying lunch to members in the fields is normally done by children. In households involved in cottage industries, such as bidi-making (making cigarettes), men and boys work at these tasks in their own homes. On days when water does not come in the water taps, women and girls go in groups to the pond to bathe, wash clothes, and clean utensils.

A few households operate tea stalls or a shop in the front room of their home. While the men run small businesses, women run the household. The household size, its occupation, family composition, caste, and economic position determine to a great extent its time and task allocation.

Urban Households in Baroda City⁷

Baroda City lies in the center of Gujarat state. It is a city of gardens and palaces, a center of higher education, industrial activity and trade. The

city has a cosmopolitan population. Opportunities for women to take up jobs are many and varied in this fast-developing city.

The lifestyles of urban households are markedly different from rural lifestyles for many reasons. Urban households generally consist of a nuclear family, with fewer children but higher aspirations than rural families. The standard of living maintained is markedly higher in urban than in rural households. Rural and urban households differ in standards of cleanliness and sanitation within and around the house; interests; facilities available and possible; ownership of material goods, equipment, and tools; help acquired and used; household size and composition; content of homemaking job; family imperatives and needs; and market and transport facilities. Accordingly, strategies adopted by urban households for time and task allocation and division of labor tend to differ from strategies of rural households.

Demands on an urban housewife's time include procuring food supplies, storing the food, preparing meals, shopping for clothing and getting cloth stitched, laundering clothing, caring for small and large household utensils and equipment, caring for the house, including daily and weekly cleaning, shopping, caring for family members, packing tiffins (lunch boxes), attending to the mail, supervising family members and paid help, caring for pets, and attending to "umpteen" odd jobs. In addition, there will be the demands of her job if she is gainfully employed outside the home.

Housewives with better financial means spend less time on manual tasks such as care of the house, utensils, and clothing, while they spend more time on shopping and management activities, care of family members, social activities, and leisure pursuits. Men generally are employed outside the home. In better-off families they do not participate in household tasks, though they do sometimes in families of moderate or lesser means.

Daughters participate in care of family members, meal preparation, shopping, and management, while sons follow the example of their fathers and help with selected home tasks. Whether the housewife is employed outside the home or not, whether of high, middle, or low income, whether young or old--on her rests the responsibility of managing the resources of self and others to fulfill family imperatives and needs.

Kusum ben, with a household income of 2,800 rupees per month, is in a position to have paid help to do laborious tasks such as care of utensils, house, and clothes. All that she is required to do in these three jobs is to assemble the pots and pans in the cleaning area, fold and store garments after they are laundered, send garments that need ironing to the commercial ironer, make beds, arrange furniture, tidy up the bookshelf, and maybe make a flower arrangement to brighten up the room.

Saroj ben, on the other hand, has only a moderate income to support her household and cannot afford to have paid help for all the cleaning jobs. She decides to wash clothes herself because she enjoys this, but keeps paid help for cleaning utensils and the house. She pays her domestic help 25 rupees per month on the condition that they merely sweep and swab the floors and wash and stack utensils. Saroj ben must dust the furniture, arrange it, tidy up the rooms, make beds, tidy up cupboards and shelves, and store utensils, dishes and tools in their own places. The part-time domestic help works in four more

houses. Saroj ben therefore spends slightly more time on care of utensils and house. She spends nearly three times as much time on caring for clothes as Kusum ben.

The amount of time spent on care of children, shopping, management, and cooking does not vary much among housewives, as these are tasks which Indian housewives prefer to do themselves regardless of income. Amount of time spent on leisure, sleep, and rest does not show much variation either, though it is slightly less for the housewife with moderate income.

Use of time- and labor-saving devices and paid help makes a lot of difference in time and task allocation and division of work. Participation by family members becomes less with greater use of paid help and electric gadgets, convenience goods, and commercial help. Seasonal variations and festive occasions also lead to variations in time use.

As in rural areas, women in urban Gujarati neighborhoods sometimes gather to help in making sweetmeats, papads, and other foods. Working wives depend either on paid help or attend to their household chores before and after work, drawing on help of husband, sons and daughters. During examination times for the children, the working wife may get her husband's help. Grown-up daughters are assigned responsibility for getting dinner for the family as training. Thus, a variety of factors come into play in time and task allocation of households. Differences exist among households in their strategies to attain family imperatives and needs.

Suburban Middle Class Households in Ahmedabad⁸

In middle class suburban households in Ahmedabad, Gujarat, most families are nuclear rather than extended. Husbands have fixed work hours outside the home while the women usually stay home, do housework, fix meals, and take care of children and family goods. These families are not generally wealthy enough to hire full-time servants, though some hire part-time help to do the most onerous household chores. If the women work outside the home, it hurts the family's ritual status (i.e., status in the religious community). Children sometimes help with housework. The relationship between husbands and wives is relatively egalitarian, though the expectation is that women will obey and assist husbands, and, in return, the women will receive provision and supervision.

Most of the households in this study are Baniyas. The neighborhoods in which they live are heterogeneous, and people know and interact with people from other caste groups (more, probably, than such interaction occurs in villages). All of the women participating in the study were urban-born and many of them had been raised indulgently but in families that had suffered financial loss. These households are much concerned with acquiring material goods and attaining and securing status.

8. by Ellen C. K. Johnson. Based on Wood, M.R. 1975. Employment and family change: A study of middle-class women in urban Gujarat. In Women in contemporary India: Traditional images and changing roles, ed. Alfred de Souza, 37-53. New Delhi: Manohar.

PART SIX: IMPETUS FOR CHANGE

In this concluding section Carroll discusses the interplay between women's programs in India and international development efforts.

**RESOURCES AND SOCIAL CHANGE: THE IMPACT OF INTERNATIONAL
FUNDING AGENCIES ON WOMEN'S PROGRAMS IN INDIA**

by
Berenice A. Carroll¹

Programs to meet the economic, educational, and health needs of women in the context of development require growing awareness as well as substantial resources. Social change takes place in an intricate web of local, national and international processes that influence and shape each other, sometimes imperceptibly, sometimes through dramatic events or in visible symbolic form.

The International Women's Year, declared by the United Nations in 1975 and extended to the International Women's Decade, 1975-1985, has served as the visible symbol representing the extensive, but often less perceptible, interplay of international development efforts and women's programs in India. In this interplay, the projects, programs and centers initiated and designed by Indian women have played a leading role both within India and at the international level.

"As a direct fallout of the International Women's Year deliberations of 1975, State Government and voluntary agencies co-operated in some States of India to set up Women's Economic Development Corporations." These words, with which the Gujarat Women's Economic Development Corporation opens its brochure, illustrate a widespread acknowledgment of the impact of the International Women's Decade on women's programs in India. Similar references to the International Women's Year and 1975 as a pivotal year recur again and again in assessments of recent developments in projects and studies on Indian women.

When the International Women's Year was declared in 1975, it followed a long period of evolution from the women's rights movements of the 19th and early 20th centuries to the new wave of women's activism in the 1970's, in India as well as in other countries. International agencies and associations had already played a significant part in this evolution. A commitment to equal rights of men and women had been written into the United Nations (UN) Charter, and the UN Commission on the Status of Women was established in 1947 to seek ways to implement this commitment. In 1979, the UN General Assembly adopted the Convention on the Elimination of all Forms of Discrimination Against Women. Each of the three Decade conferences, held at Mexico City (1975), at Copenhagen (1980), and at Nairobi (1985), adopted a world plan or program of action on women's concerns, encompassing the Decade themes: Equality, Development, and Peace.

While much remains to be done to achieve world-wide ratification and action on the principles of the Convention and on the recommendations of the Decade conferences, the impact of the Decade is already felt to be considerable. "The effects of the world conferences and the Decade on Governments and women's groups around the world has been substantial," stated Minal Saran at a national seminar reviewing the achievements and issues of the Decade in January 1985. "Many new organisations have been formed and older

1. The author acknowledges with gratitude the advice, cooperation, and information provided by Professor Amita Verma, Head, Department of Child Development, M.S. University of Baroda, who has helped greatly to enrich this essay.

ones have been revitalised. At the Government level, new programmes and projects² have been set up, policies have been changed and new legislation passed."

The impact of the Women's Decade has been felt through three main avenues: first, through the United Nations and its agencies in various activities, including the Decade conferences and the corresponding growth in awareness of women's issues in India; second, through preparatory and follow-up work by Indian government and voluntary agencies; and, third, through funding of women's programs by international agencies or grants from foreign governments, or by donations and grants from private sources such as foundations and churches.

Growing awareness and commitment to improvement of the status of women at the level of state and national government agencies in India has been manifested in a number of significant developments in recent years. In 1984 the Ministry of Social Welfare was reorganized and renamed "Ministry of Women's and Social Welfare," and a woman minister, M. Chandrasekhar, was appointed as head. In 1985 the Directorate of Women's and Children's Programs, originally part of the Ministry of Agriculture, was re-activated as a unit of the Ministry of Rural Reconstruction, with greater emphasis on women's programs in the integrated rural development projects. A Department of Women's Education was established in the National Council of Education, Research and Training at New Delhi, an autonomous body supported by grants from the Ministry of Education, under Dr. Sarojini Visaria. A number of states have also recently eliminated tuition fees for women's education from the pre-primary through post-graduate levels. In Gujarat, for example, this policy was adopted in the election manifesto of the Congress (I) party with a serious commitment to the advancement of women's education.

No systematic survey or assessment of women's studies in India has been undertaken to date, though the Indian Association of Women's Studies is planning such an assessment to take place in the near future. On a preliminary basis, however, it is already clear that many of the research and development projects relating to women in India in recent years have been supported and in some cases initiated by international sources.

The influence of international assistance has been felt especially in the areas of research and research-action projects relating to economic development. "The outcome of the Decade for Women has been the creation of a new field of study and action called 'Women in Development'."³ Thus, for example, the Centre for Women's Development Studies in New Delhi, founded in 1980 and now one of the foremost institutions in this field, has received assistance from the Ford Foundation since 1981, and support for specific projects from the International Labor Organization (ILO), United Nations Children's Fund (UNICEF), United Nations Educational, Scientific, and Cultural Organization (UNESCO), the Norwegian Development Agency (NORAD), the Dag Hammarskjöld Foundation, the United Nations Voluntary Fund, and the United Nations University (Tokyo).

2. Minal Saran, "The United Nations Decade for Women--The Role of Non-governmental Organisations." In *A Decade of Women's Movement in India*. 1985. Bombay: Research Unit on Women's Studies, SNDT Women's University.

3. Ibid.

Other important new research centers in this field have also received substantial funding from international sources. The Institute of Social Studies Trust (ISST), New Delhi and Bangalore, was founded in 1964 with a focus on cooperative development and elimination of poverty. Since the beginning of the Women's Decade in 1975, ISST has concentrated mainly on issues related to inequality and economic development needs of women. "The focus is on the poorest women and their families."⁴ ISST's goals have included strengthening the statistical data base on women and children, policy research towards integrating women into large-scale rural development projects, identification of technology options open to poor women, stimulating debate on the issues, providing leadership training for women's organizations, and providing information services. In their activities directed towards these goals, ISST has had extensive support from various international agencies including UNICEF, Food and Agricultural Organization of the UN (FAO), the Swiss Development Corporation (SDC), the Ford Foundation, the OXFAM India Trust, ILO, United Nations Development Program (UNDP), and others.

The Research Unit (now Center) on Women's Studies (RUWS) of Shreemati Nathibai Damodar Thackersey (SNDT) Women's University, Bombay, was established in 1974, just before the opening of the Decade, in response to the work of the National Commission on the Status of Women, whose report was published in that year. In 1981 the RUWS received a three-year grant from the Ford Foundation for "expansion and strengthening of research, teaching, and documentation." It has also received project support from UNICEF, the Institute for International Education, and other external agencies.

International support has been provided also for India-based cross-national studies of women and development. Most recently the DAWN project (Development Alternatives with Women for A New Era), whose secretariat is located at ISST in New Delhi, was carried out with support from a variety of international agencies including the United Nations Institute for Training and Research for the Advancement of Women (INSTRAW), the Michelson Institute (Norway), NORAD, the Ford Foundation, and others. DAWN was initiated by ISST to develop an analysis and policy proposals on development from the perspectives of Third World women. The DAWN document, prepared in India by Gita Sen with Caren Grown for presentation and discussion at the 1985 Nairobi conference closing the Decade for Women, was circulated to an advisory board of women from seventeen countries and draws on research and policy documents as well as action-oriented experience from many countries and regions. The document is an important summation and synthesis of the knowledge and understanding of issues relating to women and development that has emerged in the course of the Decade.

In the Baroda area, the setting of the case studies presented in this report, many of the research and action projects and programs for women have had international support.

Members of the Home Science Faculty at M. S. University of Baroda have taken the leading role in this area for over two decades. Since 1960, they have carried out at least ten major projects with international support dealing with health, nutrition and child development. The primary clientele of these projects has been women, as field workers, teachers, mothers, or

recipients of benefits. These projects included: studies of coverage, costs, and impact of programs providing nutritional supplements and health service for women and children (projects supported by the United States Agency for International Development [USAID], Ford Foundation, and the United States Department of Health, Education and Welfare [now Health and Human Services]); training research and evaluation projects for field staff in Nutrition Health Education (supported by the World Health Organization [WHO]); pilot projects in science, nutrition, and health education for teachers and care-takers (women and adolescent girls) of children (supported by the Ford Foundation); curriculum development and community outreach programs in family planning, including undergraduate college programs, training for village field workers, and a peer program for adolescent out-of-school girls (supported by the American Home Economics Association and International Planned Parenthood Federation); study of traditional and community resources, information, and support systems for health care of women and children in poor urban communities, leading to establishment of new services for children and programs in nonformal education for women (supported by UNICEF); and a large-scale "Social Inputs Planning" project for improved quality of life for women and children in nine districts of Gujarat (supported by UNICEF and the government of Gujarat), embodying planning proposals for economic development activities and educational programs for women. Home Science Faculty members who have played a prominent role in these projects include Professor Amita Verma, Professor Tara Gopaldas, Dr. T. S. Saraswathi, Dr. Sundar Gujral, and Dr. Subadra Seshadri.

A number of important research projects relating to women are also being carried out by the Population Research Centre at M.S. University of Baroda, with assistance from the Ford Foundation, the Rockefeller Foundation, and WHO. The focus of these studies is fertility and family planning, rather than women as such, but the data and research findings include interesting results for women and development planning.

The Operations Research Group (ORG), an independent research and consulting firm based in Baroda, has also carried out a number of important and comprehensive studies focusing specifically on women's perspectives and roles. A study of "Women's Perspective in Family Planning" was carried out by ORG under the sponsorship of the Division of Family Health of WHO. ORG is currently (in 1985) conducting the India portion of an important cross-national study, initiated and funded by ILO on "Changing Role of Women and Their Demographic Behavior."

In the Baroda area and around the country, many action programs for women in India are supported by international donors. The Gujarat Women's Economic Development Corporation receives funding from NORAD and Ford Foundation. The Amul Dairy Cooperative and Dairy Development Board is heavily subsidized by the FAO/World Food Programme, the European Economic Community (EEC), UNICEF, UNDP, World Bank, OXFAM, WHO and others. While these are not specifically women's programs, and in fact the National Dairy Development Program (NDDP) has been under criticism for discrimination against women, the overwhelming majority of the dairy farmers are women. The Self-Employed Women's Association (SEWA), in Ahmedabad, emphasizes self-reliance for women and has in fact developed its programs primarily with local funding and the dues of its members, who form a union. But SEWA has also received some Government of India funding and some funding from international agencies for special

projects, including OXFAM and USAID. The Women's Centre, Bombay, receives assistance from a Boston-based church group. Vimochana, an activist women's group in Bangalore, has received support recently from the Unitarian Universalist Service Center to establish Stree Lekha, the first women's bookstore in India.

There has been some questioning of the impact of all this international funding. Some critics argue that development must be India-based, even locally-based, to be effective and responsive to the real needs of Indian women. At the workshop on "Women and Development: National and International Perspectives" (University of Poona, 15 August 1985), some participants questioned the values and assumptions of modernization theory and the very concept of "development" as Western impositions, unsuited to the conditions and goals of India, especially for the rural poor. Others have pointed to the continuing deterioration of the economic status of women in India and widespread persistence of atrocities such as bride burnings and question whether the benefits of internationally-funded research, training projects, conferences, and development assistance programs are actually reaching their intended recipients, poor rural and urban women. At the National Seminar on "A Decade of Women's Movement in India: A Review of Achievements and Issues," held at SNDT Women's University, Bombay, in January 1985, Neera Desai in setting the themes of the conference raised the question:

Has the women's movement developed its inner strength to sustain when the decade gets over, when the International agencies will officially close their shutters? What are the issues which will generate solidarity of women across caste/class divisions?

On the whole, however, those who have been directly involved in internationally funded projects are nearly unanimous in favor of accepting such funds. As Ella Bhatt of SEWA remarked, "all money is dirty," and the key issue is how to direct it in such a way as to assist in developing self-reliance. Recipients of international funding consistently report that the donors provide the funds and leave the Indian personnel free to define their own goals and methods. They argue that a decade is too short a time to have major impact on actual economic and social change, especially in face of the pre-existing downward trend in women's economic status in India. What the international support provides is opportunity to expand the base of knowledge, experience, and experimental projects on which to draw for policies and action for the future.

References

Aggarwal, Bina. 1983. Women's studies in Asia and the Pacific: An overview of current status and needed priorities. Occasional paper no. 4. Programme on Women in Development. Malaysia: Asian and Pacific Development Centre (APDC).

Anant, Suchitra, Ramani Rao, and Kabita Banerjee. 1985. Women at work in India: A select bibliography. New Delhi: Institute of Social Studies Trust.

Asian Women's Research and Action Network. 1985. Asian women speak out: A 14-country alternative Asian report on the impact of the UN Decade for Women. Davao City, Philippines: Asian Women's Research and Action Network, PILIPINA.

Centre for Women's Development Studies. n.d. [1983.] Women's participation in political life in India. New Delhi. Mimeo.

Centre for Women's Development Studies. 1985. The non-aligned movement and International Women's Decade: A summary of decisions. New Delhi.

DAWN (Development Alternatives with Women for a New Era). 1985. Development, Crises, and Alternative Visions: Third World Women's Perspectives. Written by Gita Sen, with Caren Grown, for DAWN. New Delhi: Institute of Social Studies Trust.

Department of Political Science, University of Delhi. n.d. Seminar on perspectives and organization of women's studies units in Indian universities. Report of a seminar held 21-23 April, 1985, New Delhi. Mimeo.

Flavia. 1984. Violence in the family: Wife beating. Bombay: Women's Centre.

Gujarat Women's Economic Development Corporation. n.d. [1984.] Brochure. Ahmedabad.

Institute of Social Studies Trust. n.d. Three Year Report, 1981-83. New Delhi and Bangalore.

Institute of Social Studies Trust. n.d. A two-day southern dialogue between researchers and activists. Report of a meeting in Bangalore, 29-30 October 1983.

Manushi: A Journal About Women in Society. Bimonthly journal in English and Hindi editions. New Delhi.

M.S. University of Baroda Faculty of Home Science. 1981. Social inputs plan for Waghodia and San Kheda Taluka Baroda District: Final Report. Chief planners: Prof. Tara Gopaldas, Prof. Amita Verma, and Dr. T. S. Saraswathi.

Operations Research Group. 1985. Women's perspective in family planning programme. Sponsored by Division of Family Health, WHO, Geneva. Baroda: Operations Research Group.

Patwa, Subhadra. n.d. [1985.] Women's studies centres in India. Bombay: Research Unit on Women's Studies, SNDT Women's University. Mimeo.

Raj, Maithreyi Krishna. 1983. Research on women and work in the seventies-- Where do we go from here? Bombay: Research Unit on Women's Studies, SNDT Women's University.

Research Unit on Women's Studies, SNDT Women's University. n.d. Report on the National Conference on Women's Studies, April 20-24, 1981, at Bombay.

. 1985. A decade of women's movement in India: A review of achievements and issues. National Seminar, 8-10 January 1985. Papers by Sarojini Shintri, Minal Saran, Neera Desai, Vibhuti Patel, and others. Bombay. Mimeo.

. 1985. Women and political participation. RUWS Newsletter 6, no. 1 (March).

Sangharsh. Occasional English-language journal. Bangalore: Vimochana, Forum for Women's Rights.

Socialist Health Review. 1984. Women and health. Special Issue (Bombay) 1, no. 2 (September).

Teaching Politics. Journal of the Delhi University Political Science Association. 1985. Women's development: Some perspectives. 10 (Special issue).

GLOSSARY

acre - about 4,000 square meters
anganwadi - center for nutrition education
autorickshaw - three-wheeled taxi
bajri or bajra - a cereal; millet
balwadi - preschool
Baniya or Bania - a Hindu subcaste, a jati
banyan tree - a large indigenous tree
Baria - a jati
Barot - a jati
Bavla-type latrines - a type of dry latrine designed at Bavla (a place)
beegha - unit of measure, less than one acre
below poverty line - having less than Rs. 3,500/family/year; having less than Rs. 70/person/year
bhajan mandal - a gathering of women coming together for worship
Bhil - a tribal jati
bhuas - quack doctors (voodoo magic men)
bidi - type of country-made cigarette of dried rolled, tobacco leaf
brinjal - a vegetable known as eggplant/aubergine
chakki - primitive grinder for grinding grain into flour
chappatis - thin, unleavened bread, similar to a pancake
charpoy - a woven string bed
chulah - mud and dung stove, stove for cooking
compost pit, bio-manure pit - a pit for collecting household waste and cowdung
curry - vegetables or pulses cooked in gravy
dai - midwife
dal - legumes, lentils (pulses)
dalia - a type of dal (unsplit)
dangar - rainfed rice
dargha - a place where Muslims worship (has a tombstone)
dhobi - washerman
divel - hair oil
Diwali - Hindu New Year
doya - a ladle to take out water from water pot
dupatta - shoulder wrap worn with a dress and trousers
fakir - Muslim priest
Garashia - a Muslim subcaste
ghada - water pot
ghee - clarified butter
gilli-danda - a game played with sticks
godown - storage building
grandal - kind of lentil
gram sevak - village (social) worker
Gujarati - language spoken in the state of Gujarat
Hanuman - monkey God
harijan - "children of God", a term referring to jatis formerly referred to as "untouchables", Hindu scheduled caste
hectare - 10,000 square meters (about 2 and 1/2 acres)
jaggery - molasses made from sugarcane juice
jati - a caste
jowar - a cereal; sorghum

kaccha or **kacha** - of weak, not sturdy, construction
kadai - deep, round-bottomed pan for deep frying, sautéing, and cooking foods
kajal - black ointment used as eye-liner
Kali - a hindu goddess
kameez - garment similar to a tunic
katori - a small, deep dish for taking red gram curry or similar food items
kerosene - crude oil
khadi - handloomed cotton cloth
kharif crop - monsoon crop
khichdee or **kitcheree** or **khichadi** - a mixed dish containing rice and pulse
ladoo - a dessert made of wheat flour, jaggery, and ghee
landless laborers - agricultural laborers who own no land
large land holders - those farmers having over ten hectares of land holding
leaf plates - disposable plates made of dried leaves
lotta - small jar for carrying water
mahila mandal - women's club or society
maund - ten kilograms
marginal farmers - those farmers having fewer than one hectare of land holding
matka - pot-bellied, small-mouthed clay pot for storing water
Mosque school - school where Muslim children are taught regarding their religion and its practices in Arabic
Muslim - religious group
Nayak - a jati, formerly a tribal group
neem - a variety of tree
paise - monetary unit, worth 1/100 of a rupee
panchayat - local advisory council
paniyara - area where drinking water is stored in the house
papad - a snack food
Patel - a jati
peon - odd-job man
petromax - a pressure kerosene lamp
pucca - of strong, sturdy construction
puja - worship
rab - maize porridge
rabi crop - winter crop
rajahji - honored prince, ruler
ration store - fair price store, part of government scheme to subsidize food for lower income households
rotla - unleavened bread made from maize flour or wheat flour
rupee - monetary unit
salwar - woman's trousers
sari - long cloth draped around the body by Indian women
sarpanche - head of panchayat (mayor)
small farmers - those farmers having one to ten hectares of land holding
standard - level or grade in school
syce - stableman, horse trainer
Tadavi - a jati
talati - person in charge of record keeping
taluka - governing unit
tansali - round-bottomed bowl of brass for taking food
tapeli - cooking utensil without a handle
tava - roasting pan of metal or clay used for surface cooking
tempo - three-wheeled vehicle
toor dal - yellow split peas

tuwar - a type of pulse

Vasava - a jati

vatki - stainless steel bowl

vav - a well with steps reaching up to the surface of water, with towers for resting

251 07/01 119
16060

UNIVERSITY OF ILLINOIS-URBANA

338.11NB

C001

INTERNATIONAL AGRICULTURE PUBLICATIONS

3 1987



3 0112 018944527

UNIVERSITY OF ILLINOIS-URBANA



3 0112 046883556